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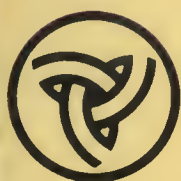
# Gateway to the Past:

## Cultural Resources Investigations in East St. Louis, Illinois

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Illinois Department of Transportation



GATEWAY TO THE PAST:  
CULTURAL RESOURCES INVESTIGATIONS  
IN EAST ST. LOUIS, ILLINOIS  
VOLUME 1

Prepared for:

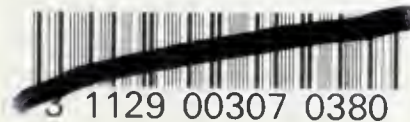
Illinois Department of Transportation  
St. Louis MARGE  
325 Missouri Avenue  
East St. Louis, Illinois

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January, 1982



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MANAGEMENT SUMMARY

In June 1980, the Illinois Department of Transportation contracted with WAPORA, Inc., Cincinnati, Ohio, to conduct Phase II archaeological testing of 23 previously recorded sites within the East St. Louis MARGE project area. An additional 13 sites and structures discovered during the initial stages of the project were also afforded Phase II testing or documentation. Phase II testing methods included archival research, oral history, hand excavation, backhoe excavation, mapping, and photographic documentation.

As the project investigation progressed, IDOT broadened the scope of work to cover new areas incorporated into the project as necessitated by refinements in the rail operational and engineering details. These areas included about 300 acres of land south of Centreville, Illinois, for the Gateway Yard loop extension, approximately 650 acres at the site of the new common TOFC (trailer on flat car) yard, nine rail interlocks, nine grade separation structures, and a proposed rail siding in the vicinity of Cahokia Mounds National Historic Monument. Reconnaissance methods implemented during this phase of work included pedestrian inspection of the ground surface where visible, shallow shovel tests in all vegetated areas, and hand augering to investigate subsurface deposits when necessary. The fieldwork for the project extended from August, 1980 to January, 1981.

A report has been prepared detailing the results of the East St. Louis MARGE archaeological testing project. The report includes discussions of the project location and the necessity to have archaeological investigations conducted in East St. Louis; an environmental reconstruction of the project area; the background prehistory and history of the project area; the results of the testing, survey, and laboratory analysis; and recommendations for future work in the area.

It has been recommended on the basis of the testing results that four multiple resource districts be afforded a determination of eligibility for inclusion in the National Register of Historic Places. This has been done to take into account the inter-relatedness of cultural resources within an urban setting, and to allow cultural resource management decisions to be made on an area-wide basis. The four districts being recommended for a NRHP determination of eligibility are Bloody Island, Illinoistown, National City, and Kerr Island. The report also includes recommendations for specific resources located within these districts. Not all cultural resources included within these districts will require further investigation.

Additionally, the survey portion of the project resulted in the location of 12 sites within the proposed common TOFC yard and 4 sites within the proposed Centreville loop extension. Of the 12 sites in the common TOFC yard, it is recommended that 4 sites require further testing to determine their integrity and to evaluate their significance. These sites are W-761-5, W-761-11, W-761-12, and W-761-13. Two sites in the Centreville loop extension should be subjected to further testing to determine their significance and to complete their documentation. These are sites W-761-19 and W-761-20.

Of the nine grade separations surveyed as a part of the East St. Louis MARGE cultural resources investigations, only two (Grade Separations #19 and #24) appear to be culturally sensitive. Both are located within the boundaries of the Cahokia Mounds National Register District, and they probably include intact portions of the Cahokia site. It is recommended that the grade separations be built within the existing right-of-ways, using retaining walls, to protect this very important site.

Of the nine railroad interlocks surveyed by WAPORA archaeologists, three were found to contain potentially significant cultural material. The NKP(IT) interlock and the Bixby interlock both contain portions of previously recorded prehistoric archaeological sites. It is recommended that further testing be conducted at each of these proposed interlocks to determine the integrity and evaluate the significance of these two sites. The H.N. Cabin interlock is located within the bounds of the Cahokia Mounds National Historic District. Because the right-of-way extends into the monument's property, the possibility exists that intact portions of the Cahokia site exist within the proposed interlock. It is recommended that avoidance of undisturbed ground take place during construction of the H.N. Cabin interlock. If this is not possible, extensive testing and possibly data recovery operations will be required.

Finally, cultural resources surveys were conducted on the proposed approaches to Merchants Bridge and McKinley Bridge. No significant resources were located as a result of these surveys, and no further work is recommended. In addition to the bridge approaches, the location of a proposed B&O parking spur was surveyed and found to be totally contained within the boundaries of the Cahokia Mounds National Historic District. It is recommended that this spur be relocated.

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## I. PROJECT DESCRIPTION

### BACKGROUND

The St. Louis railroad complex, alternately called a "gateway" or a "terminal", is of major importance to the national railroad network, and its vitality is critical to the industrial and economic health of the region. Geographically, it lies near the nation's center. Situated on the banks of the Mississippi, the gateway takes in portions of the states of Missouri and Illinois. On the west side, the majority of the rail facilities lie near the river. On the east side, however, the network extends eastward some five miles to include the Alton & Southern (A&S) corridor east of Washington Park. The major Illinois communities within the project area are East St. Louis, Granite City, Madison, Venice, Brooklyn, Cahokia, Centreville, Alorton, Dupon, Washington Park and Fairmont City. The southern boundary is the Bixby rail junction south of Dupon, and the northern boundary is the Lenox rail tower in Mitchell. Figure 1 shows the St. Louis Gateway area.

The St. Louis Gateway is the second largest rail traffic routing center in the nation. The network includes track or facilities belonging to 14 major (Class I) railroad companies, and 3 Class II (switching) carriers. There are approximately 82 miles of mainline corridors in the gateway area. The sorting of cuts, or groups of cars, for delivery to individual railroads is mainly accomplished in two large common classification yards, Madison Yard on the north and Gateway Yard on the south. Specific classifications for distant points in the country are performed in a series of "home" yards where individual railroads also handle piggyback, or trailer traffic. Gateway Yard is operated by the Alton and Southern Railroad, while the Terminal Railroad Association (TRRA), a corporation composed of eleven railroads operating in the complex, manages the functions of Madison Yard. Individual roads are charged by either of these switching carriers for the rail cars that go through the classification process in their facilities.

Railroad freight terminals, such as the one in St. Louis, are typically bottlenecks in the operations of rail systems. Increased rail traffic and age have reduced the efficiency of terminal operations and shipments often encounter excessive delays moving through congested switching and classification facilities. Facilities built early in the development of the rail system have become obsolete, but have continued to occupy sizeable amounts of land, constraining land use patterns and forming barriers to social and commercial activity.

In the St. Louis Gateway the situation is worsened by the continued presence of yards and tracks originally built near the river to hold cars awaiting the ferry crossing. These facilities became unnecessary as bridges were built and were used less and less until, in some cases, they were virtually abandoned. As in other urban rail terminals, this has served as a blighting influence on the area's economic development. Further, underutilized railroad properties do not yield tax revenues proportional to the amount of land they cover. The complicated network of yards and track has also produced a contorted street system where



delays to vehicular traffic are frequent and lengthy. This combination of problems attributable to railroad influences has led the Federal Railroad Administration (FRA), in concert with state and local officials, to seek ways to improve rail operations and to create valuable urban development opportunities by freeing riverfront land.

## ST. LOUIS METRO AREA RAIL GATEWAY ENTERPRISE

The efforts of the FRA toward resolving the problems of the St. Louis Gateway through railroad improvements were focused into a three phase program entitled the Metro Area Rail Gateway Enterprise or MARGE. The program focused on accomplishing the following three objectives:

- \* To improve the efficiency of railroad operations within the St. Louis Terminal
- \* To reduce rail/community conflicts
- \* To provide opportunities for economic and community development.

Phase I, which was successfully completed in December, 1977, was limited to the development and preliminary examination of operationally feasible physical restructuring alternatives. This initial study was jointly directed by the Federal Railroad Administration and all the 17 railroads operating in the terminal.

Phase II, which was begun in January, 1979, is a more comprehensive study to refine the restructuring plans and resolve the various railroad institutional issues as well as the community and environmental impact issues. Phase II includes estimation of costs and benefits for each of the railroads involved, together with a comprehensive cost/benefit analysis of the railroad restructuring, and will culminate in the publication of an Environmental Impact Statement. Managed by the Illinois Department of Transportation (IDOT), under contract to the FRA, Phase II has sought active involvement by the various local communities in the gateway area, and has continued the strong railroad role of Phase I.

Phase III involves final design engineering and actual construction of improvements to the rail yards and corridors in the terminal. It will begin after an alternative plan for the restructuring is selected.

## RESTRUCTURING ALTERNATIVES

There are currently some 53 railyards in the St. Louis Gateway. The MARGE project proposes consolidation of many of the smaller rail-yards into two or three larger yard facilities. Three "build" alternatives have been fully evaluated. Each alternative differs by the number of common carrier yards and by the routing of the corridor traffic. In addition, the existing 1979 conditions and the Year 2000 "no build" alternatives have been analyzed and compared.

The actual yard restructuring alternatives exhibit differences in both the number of yards that would be constructed and the manner in which those yards would operate:

- \* Two-Yard Alternative - This plan calls for the expansion of the two existing classification yards. The Gateway Yard, located south of East St. Louis, would be expanded eastward. This area is partly within the boundaries of Centreville, Illinois and is currently agricultural and residential. The Madison Yard, which is just east of Venice, would be modified and expanded south past the residential areas of Brooklyn and National City.
- \* Three-Yard Directional Alternative - This plan involves the expansion of Gateway Yard, minor improvements to Madison Yard and the construction of a third yard, the "New Yard". This third yard would be located just south of Madison Yard, adjacent to the town of Brooklyn. Madison Yard would then function as an industrial support yard with the classification functions transferred to New Yard. The directional distinction refers to the operational plan for the yards, which would have one yard handle trains coming from the east and headed west, and the other coming from the west and headed east.
- \* Three-Yard Bidirectional - This plan is distinguished from the above only in the operational plan of car and train routing. Each yard would route traffic in all directions. The physical configurations of the yards would be similar to the directional plan, except that the New Yard would be located approximately 200 feet further from the residential areas of Brooklyn, and that the expanded Gateway Yard would be constructed about 200 feet farther south from the housing areas of Centreville.
- \* No-Build Alternative - As a benchmark against which to analyze the "build" alternatives, a "no-build" situation has also been studied. This plan assumes that no improvements are made to the Gateway terminal. The no-build alternative assumes that the same traffic levels will exist in St. Louis in the year 2000 as are projected for the build cases. This traffic, to the extent it overtakes the common classification yards, would be handled at individual rail yards.

Several elements of the consolidation are the same across all the "build" alternatives.

- \* A segment of Illinois Route 3 would be relocated in order to bypass the expanded yards. The designated section begins just north of Merchants Bridge in Madison County as four-lane highway and continues 3 miles south as a two-lane road through Venice and Brooklyn, past National City, ending at St. Clair Avenue in East St. Louis. The relocation would provide a two- or four-lane, limited-access highway for this distance.



- \* A common trailer-on-flatcar (TOFC) yard would be constructed east of Brooklyn and north of East St. Louis. The location is convenient to a major interchange connecting Illinois Route 302 and Interstate 70, providing excellent access for trucks. A major rail corridor runs just west of the site. Eight or nine of the thirteen Class I carriers would consolidate their TOFC, or piggyback, operations into that one yard.
- \* There are approximately 82 miles of mainline rail corridor in the project area, and much of this would be upgraded under all of the build alternatives. Track would be physically improved by laying new or replacement track and modern centralized signaling systems would be installed. Several new rail connections or interlockings would be constructed, but the locations of the corridors and existing interlockings would remain the same. Rail operations and train routings may vary across alternatives, but the basic corridor network does not.
- \* Seventeen to eighteen grade-separation structures are warranted under all the build alternatives, because of the large delay- and collision-related conflicts that occur in the project area. Seven of these would be warranted because of yard expansions; the remainder are warranted because of conflicts along the rail corridors. Nine of these structures would also be warranted under the no-build alternative.

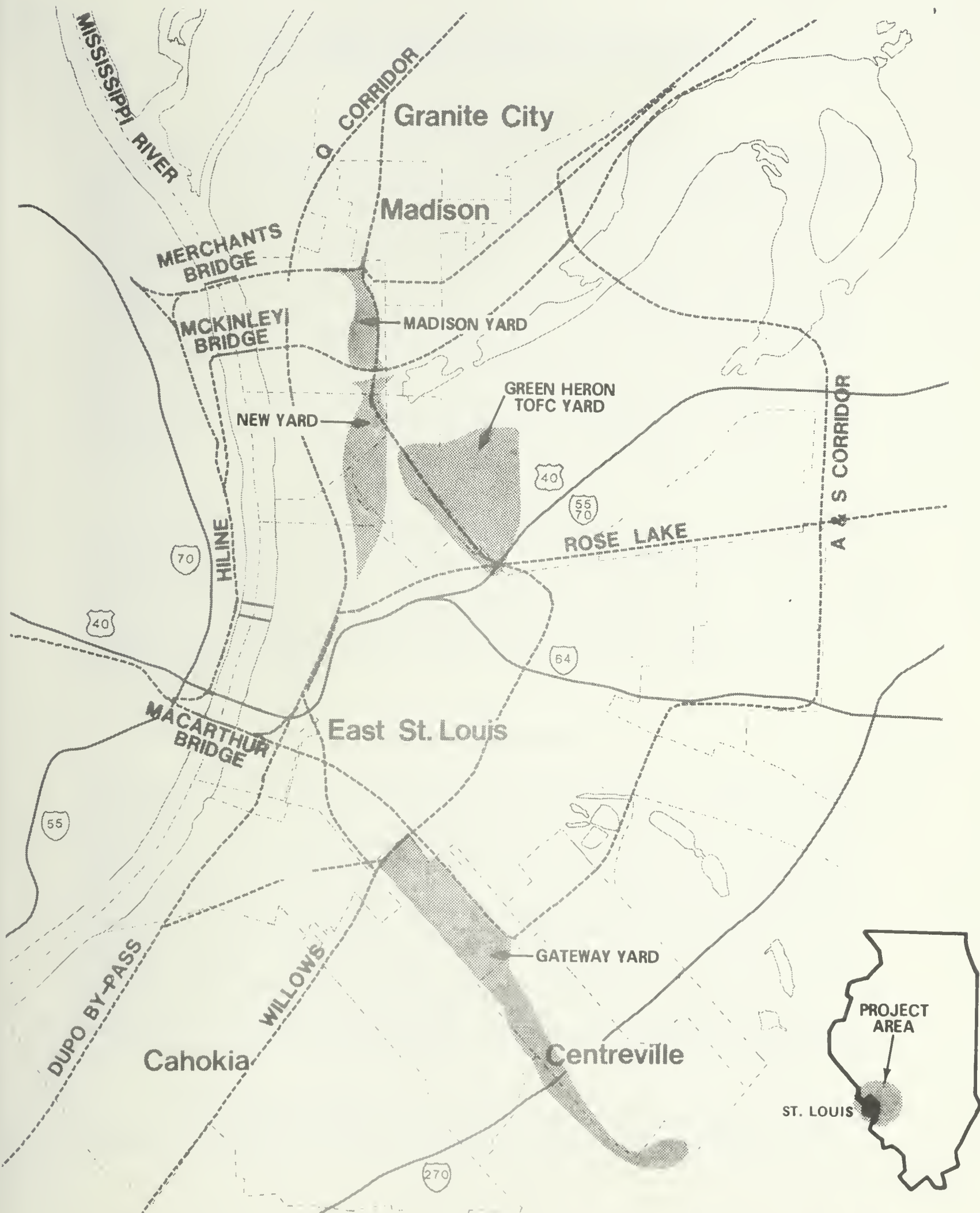


Fig 1. PROJECT LOCATION MAP



## II. GENERAL RESEARCH DESIGN AND METHODOLOGY

### INTRODUCTION

Growing concern for historic preservation throughout this century has resulted in a large body of federal legislation defining the role of government in cultural resource management, and authorizing a federal and state administrative infrastructure to facilitate compliance with the laws. Through the years, these laws have evolved in interpretation and scope concurrent with the changing philosophy over the nature of the spirit and intent of the federal statutes. Not only do the management needs of the sponsor have to be satisfied, cultural resource management must also contribute to the national and state preservation goals and research needs. In recent years, many people concerned over the inconsistencies in translation of the federal intent have urged adherence to a broad approach to cultural resource management for the greatest scientific, historic, and public benefit (King, Hickman, and Berg 1977; Schiffer and Gumerman 1977; McGimsey and Davis 1977). The best way to organize these aims into a framework that orients the study along specific research objectives to accommodate these diverse goals is with a general research design.

A general research design is an orientation for the investigation that provides for application of timely research questions that fit the cultural resources at hand in a manner that can serve as a foundation for future research, and as a basis for sound management recommendations (Schiffer and Gumerman 1977:129). A brief discussion of the Phase I recommendations, and the scope of work, as well as the preservation legislation as it applies to the East St. Louis MARGE project will help to provide a legal framework for understanding the goals of this investigation and establishment of the general research design.

### THE FEDERAL MANDATE

The federal statutes on which historic preservation is based are the Antiquities Act of 1906; the Historic Sites Act of 1935; and the National Preservation Act of 1966, as amended in 1976 and implemented by Executive Order 11593; the Archeological Preservation Act of 1974; the Archeological Resources Protection Act of 1979; and the National Historic Preservation Act Amendments of 1980. The federal legislation provides the legal mandate for consideration of cultural resource impacts in any federally funded, sponsored, or licensed undertaking and establishes the infrastructure for historic preservation. The East St. Louis MARGE project, under the management umbrella of the Illinois Department of Transportation, and requiring federal involvement, must be in compliance with the National Historic Preservation Act of 1966 (Section 106), Executive Order 11593, the Archeological and Historic Preservation Act (16 U.S.C. 469), and Section 4(f) of the Department of Transportation Act (49 U.S.C. Sec. 1653) (Downer 1979:7).

In addition, the federal laws provide for the administrative framework and partial funding for the development of state-level approaches to



cultural resource conservation through state research designs and preservation plans. The rules for guiding federal and state authorities in determining important historic properties are stipulated in the regulations promulgated by the Secretary of the Interior (36 CFR 1202, 36 CFR 1204, 36 CFR 1210, and 36 CFR 800). Since detailed discussions of these laws and regulations can be found in the Federal Register and a number of other publications (King, Hickman, and Berg 1977; Schiffer and Gumerman 1977; McGimsey and Davis 1977; and many others), this report will discuss the laws only insofar as they deal directly with designing the East St. Louis MARGE project research approach.

Any discussion of historic preservation laws eventually boils down to a search for the underlying spirit and intent of the federal legislation. The root of the question of "federal intent" can be found in the Congressional statement of policy in the National Historic Preservation Act of 1966:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That Congress finds and declares--

- (a) That the spirit and direction of the Nation are founded upon and reflected in its historic past;
- (b) That the historical and cultural foundations of the Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people;
- (c) That, in the face of ever-increasing extensions of urban centers, highways, and residential, commercial, and industrial developments, the present governmental and nongovernmental historic preservation programs and activities are inadequate to insure future generations a genuine opportunity to appreciate and enjoy the rich heritage of our Nation; and
- (d) That, although the major burdens of historic preservation have been borne and major efforts initiated by private agencies and individuals and both should continue to play a vital role, it is nevertheless necessary and appropriate for the Federal Government to accelerate its historic preservation programs and activities, to give maximum encouragement to agencies and individuals undertaking preservation by private means, and to assist State and local governments and the National Trust for Historic Preservation in the United States to expand and accelerate their historic preservation programs and activities."

Clearly, the law is intended to provide a modern approach to conservation that represents the nation's true social and historic diversity. The word "orientation" also constitutes a different set of priorities. Some investigators propose that the language means "developing and maintaining a feeling of direction based on what has gone before" (King, Hickman, and Berg 1977:56). A dictionary definition of the word "orientation" is: an "adjustment of position with reference to circumstances", or "determining



one's bearings or setting one's sense of direction" (Gove 1976), which suggests a process of feedback for the benefit of contemporary or universal questions or concerns. In any case the policy calls for a rational and unbiased sample of the data that embodies and focuses the beliefs and self-expression of each component of American society, and not discrimination for only large, impressive or old resources. As King, Hickman, and Berg aptly state (1977:56): "tangible representation in history is the right of every group that has participated in that history."

#### STATE PROGRAM

The individual states have been delegated the bulk of the responsibility toward "development and implementation of a preservation plan, based clearly on the State's history and established in conformance with local, State, and Federal legislation and mechanisms" (36 CFR 1202.5). The state of Illinois realizes that the case-by-case review of federal projects cannot be relied upon to accomplish the full intent of the federal legislation and so a state-wide preservation plan is being devised to address specific short-term and long-term objectives. The interim Illinois Archaeological Preservation Plan states that "there are eight specific objectives that must be achieved in order to obtain the overall goal of the program:

- (1) Improve protection of archaeological resources through improvement in the review/compliance/project planning process established by federal mandate.
- (2) Increase public awareness of the problems of destruction of the state's archaeological heritage.
- (3) Improve the public's knowledge and appreciation of the archaeology of Illinois through improved programs interpreting the results of scientific archaeological investigations.
- (4) Survey archaeologically unknown regions of the state.
- (5) Complete survey of state-owned lands.
- (6) Based on the results of the "state-wide" survey, the survey of state-owned lands, and an evaluation of the research and interpretive needs of the archaeologists and general public, develop a responsible program to protect and acquire a representative sample of the archaeological resources in the state.
- (7) Integrate the nomination of selected archaeological sites to the National Register of Historic Places to extend the protections associated with it to a wider number and range of resources than can be acquired by the state.
- (8) Monitor and improve the condition and quality of the systematic collections of archaeological resources in the state.

Most of the objectives of the state-wide plan are long-term, and will require careful planning of both long-term and short-term historical and archaeological activities in order that progress can be made in attaining these goals. Most people agree that involvement of short-term cultural resource management programs is the key toward effective implementation of the state program. Use of the National Register of Historic Places in conjunction with state criteria is one way that federal projects can contribute to the goal of the state-wide plan.

#### THE NATIONAL REGISTER OF HISTORIC PLACES

The published criteria for inclusion in the National Register of Historic Places are the authoritative guides to be used to indicate what properties should be considered for protection and further study. The criteria of the National Register are put forth in 36 CFR 1202 and 36 CFR 800:

"(a) 'National Register Criteria' means the following criteria established by the Secretary of the Interior for use in evaluating and determining the eligibility of properties for listing in the National Register: The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, materials, workmanship, feeling and association and:

- (1) That are associated with events that have made a significant contribution to the broad patterns of our history; or
- (2) That are associated with the lives of persons significant in our past; or
- (3) That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (4) That have yielded, or may be likely to yield, information important in prehistory or history.

(b) Criteria considerations. Ordinarily cemeteries, birthplaces or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- (1) A religious property deriving primary significance from architectural or artistic distinction or historical importance;

- (2) A building or structure removed from its original location but which is the surviving structure most importantly associated with a historic person or event.
- (3) A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life;
- (4) A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events;
- (5) A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived;
- (6) A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historical significance; or
- (7) A property achieving significance within the past 50 years if it is of exceptional importance" (36 CFR 800.10).

Any site meeting any of these criteria is eligible for listing on the National Register. However, archaeological resources are usually evaluated in terms of the fourth criterion which deals with scientific potential. The interim Illinois State Preservation Plan utilize four standards to measure the scientific potential: cost of data recovery, rarity of the resource, representativeness of sample data, and regional research questions.

The following discussion of the standards of scientific potential is drawn directly from the Interim Illinois Archaeological Preservation Plan (Downer 1979) and reflects the views of the Illinois Department of Conservation's Archaeological Advisory Committee and the Archaeological Preservation Plan Work Group made up of archaeologists with research interests in the area.

The "cost of data recovery" standard and the rarity standard are rarely used. The first standard deals primarily with "field conditions, labor conditions, type of site and setting" and adds little to a valid measurement of scientific potential. The theory behind this standard is that "the cost of data recovery operations can be worked into an optimal equation that somehow provides for adequate recovery of significant scientific data.

Rarity is a standard for sites that are uncommon, rare, or unique. However, Downer (1979) points out that rareness has little to do with scientific potential, which derives much from context and comparison (Downer 1979:17).

The "representativeness of sample data" is widely used because it allows for valid samples whose reliability can be objectively evaluated and contributes to scientific model building. The drawback of this standard is that "it can lead to gathering of data with no notable bearing on currently important methodological, theoretical, or substantive issues within the discipline". The positive aspects to this standard are such that the representative data produced may have use for questions not yet conceived (Downer 1979:17, 18).



The most commonly used measure of scientific significance is the standard of "regional research questions". This method "relies upon full consideration of the principal substantive issues within the discipline, and within the region circumscribing the investigation. A site derives its significance from the current research questions that data from it can be used to address." The drawbacks of this approach are that it risks "foreclosing future research by ignoring data that may be relevant to future questions (Downer 1979:18).

The Illinois Archaeological Preservation Plan task group summarized the discussion of scientific standards of significance by indicating that all three acceptable standards have good points as well as bad ones. They stressed that "dogmatic reliance on a single (standard)...in a cookbook fashion "should be completely avoided". In every case professional judgment must prevail and one must extract the best sample of data possible "by careful avoidance of one single approach to the exclusion of all others" (Downer 1979:18).

To facilitate evaluation of archaeological resources in the state, the Illinois Archaeological Preservation Plan provides a general synthesis of the archaeology of various regions and discusses some of the major research questions important to each area. The synthesis of the culture history of Illinois is useful as a general synopsis, but is lacking in data about the historic period. As the designers of the state plan note: "The Historic Period is virtually unknown from the archaeological record" (Downer 1979:27).

The major theoretical frameworks in Illinois prehistoric sites research revolve around a theme of gradual evolution in the societies that inhabited the region, and investigation of the ecological relationship between those societies and the environment. Research paradigms comprising the ecological emphasis of study include settlement archaeology, environmental archaeology, cultural ecology, and a systems theory/ecosystems approach that is basically a synthesis of the first three (Downer 1979:27). These paradigms have been adapted to three types of study: (1) reconstruction of culture history, (2) reconstruction of past lifeways, and (3) analysis of cultural processes in the past (Downer 1979:28).

In the general area of investigation can be found many examples of all of these different approaches to prehistoric sites research. Much of the research has dealt with the Cahokia Mounds site and sites encompassed in the Cahokia "network" or "influence sphere" (see Fowler 1977 and list of references). Other studies in the American Bottoms, for instance Munson (1974) and Bareis (1964) have investigated the relationship between river hydrology and floodplain morphology with prehistoric settlement. The extensive on-going mitigation program for the proposed FAI 270 project (Kelly et.al. 1979), sponsored by the Illinois Department of Transportation, will, in addition to answering many of the questions posed for the area's prehistory, provide an extensive data base for deriving problem-oriented research approaches and managing prehistoric cultural resources in the American Bottoms region. It will suffice to say that previous investigations in the American Bottoms have generated an amount of comparable data and research questions that must be utilized in designing an approach that contributes to the goals of archaeology and enables well-informed decisions in preservation management. A detailed discussion of the data base and previous research orientations bearing some importance to designing the investigative approach for the reconnaissance portion of the MARGE project will be included in Chapter IV.

## ILLINOIS STATE UNIVERSITY STATE-WIDE PLAN FOR HISTORIC SITES

Any testing investigation is closely linked to the reconnaissance inventory, or groundbreaking survey, that formed the basis for the Phase II recommendations. The initial study that preceded the MARGE project testing phase consisted of a field reconnaissance supplemented by a "records, archives, and documents search for information to: (1) establish a general historical framework for the project area, (2) provide clues to the kinds of documentary resources present and their locations, (3) determine ownership, function, and occupation dates of sites found, (4) aid in the identification of material remains, and (5) be used in the development of the survey design" (Smith and Lange 1980:18). In the absence of a state research and preservation plan, Smith and Lange discussed the aspects of significance for historic sites and proposed a state-wide plan for investigation of historic sites.

Significance was discussed at several different levels including anthropological, historical, social, ethnic, public, and scientific significance. The quality of anthropological significance is defined as cultural resources having the potential to contribute toward developing, confirming, or clarifying "hypotheses about long-term culture change and/or the relationship between a culture, its components, and its environment" (Smith and Lange 1980:133). Going beyond the broad disciplinary level, Smith and Lange divide anthropological significance into four categories: historical, social, ethnic, and public.

Historically significant resources are defined as those that: "(1) can be associated with a specific individual, event, or aspect of history; (2) may provide information about cultural processes and patterns from the historic period; (3) have potential for use in the identification and reconstruction of specific cultures, periods, lifeways, or events; (4) represent a typical or well-preserved example of historic culture, period of time, or category of human activity; or (5) may yield information on historic social interaction, use of space, or economic activity" (Smith and Lange 1980: 133).

Social significance is attributed to resources that may be useful for reconstruction of the cultural past, for testing hypotheses about human behavior, and for the overall study of the questions raised by the social sciences. Closely tied to both anthropological and historical research, the study of society is accomplished "...through analysis of social institutions, relationships, interactions, structures, and the collective behavior of humans" (Smith and Lange 1980:134).

Ethnic significance relates to the values of religious, mythological, spiritual, or other symbolic importance for a group of people. As a tool of anthropology, archaeology is the means to better understand the physical remains of ethnicity (Smith and Lange 1980:135).

Public significance is a value of the benefits accrued to society from cultural resources. Smith and Lange cite four kinds of benefits to society: "(1) acquisition of knowledge concerning the human past; (2) preservation of our nation's cultural heritage for public exhibit, enjoyment, understanding, and inspiration, in addition to indirect benefits to educational



research institutions which interpret those remains; (3) economic benefits of tourism and publication of local cultural heritage facts where cultural resources are available; and (4) development of predictive models for area-specific cultural resources which allow for improved conservation and cost-effective administration of lands containing cultural resources" (Smith and Lange 1980:135).

Also discussed by Smith and Lange (1980:131, 134) are scientific significance (establishing facts and generalizations about the past) and substantive significance (archaeological data which bear on specific events and times). These two levels of significance are intimately related to other significance criteria and anthropological/ archaeological studies in general.

As a basis for determination of site significance, the Historic Sites Division of the Contract Archeology Program at Illinois State University has initiated a state-wide research design for historic sites. The research design is based on the assumption "that meaningful interpretation is based on comparative study of similar human cultural remains, and that the remains (sites or sub-site areas) must be relatively similar in function and time to be adequately comparable. Similarity may, in turn, be defined on the basis of multiple variables, some of which are drawn from parallels in prehistoric studies: (1) environmental zone; (2) major temporal period; (3) ethnic group; (4) status; and (5) function/profession (Smith and Lange 1980:138). The total number of sites in the state-wide plan can be derived by multiplying the total number of subdivisions in each of the five categories by 10 (minimum number of sites necessary for statistical reliability). The aim of the state-wide plan is the establishment of the following research goals: "(1) it establishes a comprehensive plan for investigation; (2) it establishes a theoretical, methodological, and statistical base for the study of historical research in the state; and (3) it helps guide us toward an interpretation of what is significant" (Smith and Lange 1980:145).

The utility of the Illinois State University state-wide plan must be measured by its ability to satisfy the federal and state goals of preservation and management and to contribute to the aims of scientific research. There appear to be major problems in the formulation of the variables from which the statistical sample is to be derived. The problems stem from over-dependence on a methodological scheme derived in part from prehistoric settlement studies. The result is a plan that fails to address the full range of historic sites in the state while at the same time over-representing the narrow range of site classes possible in manipulation of the variables. The strength of the Illinois State University plan is derived from the integrated multi-disciplinary approach to significance which is basic to effective implementation of the plan. The state-wide plan for historic sites is still in trial formulation, and as Smith and Lange point out: "The categories are not rigid and some may be subject to modification based on continuing documentary and field research (1980:138).

#### SUMMARY

The federal statutes, the state preservation plan, and the Illinois State University state-wide plan provide general guidelines for the cultural resource work to be done in the East St. Louis area. The underlying

thread connecting all of the above guidelines is a very strong concern for an approach to cultural resource management that is representative of the area's true social and historic diversity and an investigative framework that contributes to the greatest scientific, historic, and public benefit. In an attempt to fulfill that general intent and with reference to the specific guidelines set forth in the Illinois Department of Transportation scope of work, the following general research design was constructed.

#### GENERAL PROJECT GOALS

The general research design was constructed to accomplish one basic goal: "(to) determine the significance of cultural resources identified during the initial survey, and, if necessary...recommend strategies for mitigation" (Pitz 1980:1). In order to accomplish this goal in compliance with the intent of the federal statutes, two objectives must be met:

- (1) a sound data base must be generated for each site, and
- (2) an overall research strategy must be devised to evaluate the public, historic, and scientific significance of the sites at the local, state, and national levels.

In practice these two objectives are accomplished concurrently with considerable input from the data base to the research design and vice versa. In theory the data base is a set of existing documentary, oral, and archaeological information for a site and the research strategy is a construct for organizing, interpreting, and evaluating the data.

The research design as broadly defined by the scope of work (items a and d) requires that "research questions should be directed toward a more comprehensive understanding of forces which affected the social and economic evolution of the East St. Louis waterfront and, in turn, the impact of the waterfront on the regional development" (Illinois Department of Transportation 1980).

The generation of a complete data base is accomplished through scope of work tasks "b" and "c", which discuss the nature of the archival and oral documentation and extent of the field collection of architectural and archaeological data. The collection of data was designed to be accomplished within the framework of the research design to enable full evaluation of significance, and to serve as a foundation for future research and as a basis for management recommendations.

#### GENERAL RESEARCH DESIGN AND METHODOLOGY

The significance of the East St. Louis riverfront area in terms of current trends in historical and archaeological research domains lies mainly in its role in the development of transcontinental transportation networks across the United States, its subsequent growth as a manufacturing center during the late 19th and early 20th centuries, and the accompanying change and development in the local population. It is important that a holistic, diachronic approach be taken towards the elucidation of this research topic. Not only did the East St. Louis riverfront play an important role in the settlement and economic development of the western portion



of the continent; the riverfront, itself, was and still is drastically affected by changes in economic development and transportation networks in other parts of the country. For this reason, a research design aimed at providing an explanatory model of culture change during the periods of settlement and economic development has been generated. Among the questions to be addressed will be the role and internal development of the initial Illinoistown settlement and the Wiggin's Ferry complex; changes in emphasis upon rail transportation through time and their effects upon the structural appearance of the East St. Louis riverfront during the past 100 years; and the role of the rail transportation network on the economic and social history of the area's inhabitants. Particular emphasis will be placed upon a comparison of the economic social status and land use information as observed archaeologically between the Kerr Island "shanty town" complex, the National City housing development, the Leap Year shanty town, old Illinoistown and Bloody Island. Excavations have been undertaken on "company housing" sites in England (Chapman 1972; Riden 1973:210-216), but little has been done in the United States in terms of documenting economic and social changes through time and space within industry-related housing complexes.

During the early decades of the 19th century, the Mississippi River provided a major north-south transportation artery, but its crossing was a major obstacle to east-west settlement and communication. A ferry across the Mississippi, such as the Wiggin's Ferry, would have provided a focal "jumping-off" point for settlement and trade prior to crossing the river. The latter half of the 19th and early 20th centuries was, again, a period of intense economic and social upheaval in the East St. Louis area occasioned by labor disputes, racial conflict, and political chaos. At some point in the 20th century, East St. Louis began to decline economically as a cumulative result of a long history of political anarchy, unwise land use, poor fiscal policy, and a general shift in the manufacturing concentration away from the region. The history of East St. Louis presents a unique opportunity to study the interrelationships between the political, economic, social, land use, and environmental phenomena during the evolutionary stages from a small ferry town to a major rail hub and manufacturing center.

Another pervading theme in the history of the human occupation of the area has been the interplay between the natural forces of the Mississippi River and human aspirations. Study of the hydrological/morphological changes through time provides a picture of land use and commercial ties to the river as well as a measure of the kinds of adaptation and/or modification to this unstable environment by humans through prehistoric and historic times.

#### HISTORIC DOCUMENTATION AND INFORMANT CONTACT

In order to fulfill both the practical and theoretical objectives of the proposed research, information gained from a program of literature review, archival research, informant contacts, architectural documentation, alternative survey techniques, test excavations, and backhoe trenches has been used to explore those inter-related factors that contributed to economic and social change along the East St. Louis riverfront during the past 200 years.

The potential for evaluating the significance of historic sites is greatly increased when the testing program is combined with a relatively thorough background literature review and archival search. The use of informant contacts and formal oral history studies also greatly enhances a researcher's ability to judge the significance and cultural integrity of a site. For these reasons, both historical documentation and formal oral history research was conducted during the first phase of this project. The information gleaned during these investigations was available for interpretive use during the testing phase of the project.

The literature search had two foci. Information concerning the development of the sites included in the project was gathered to supplement and to help guide the archaeological interpretation of the sites. Information concerning regional industrial and transportation development and its social and economic background was used to integrate site information with the larger questions of transportation network development and change in the United States.

To accomplish the site-specific objectives of the literature search, emphasis was placed upon information such as maps, photographs, building plans, early atlases, plat maps, tract sketches, and other available sources. Utilizing this information as well as archaeological data, a series of overlay maps was produced that depict the sites and their environs through time between ca. 1790 and the present. Based on information available for overlays, such as locations of residential structures, shops, commercial/public structures, agricultural land, railroad structures, major transportation routes, etc., changes in settlement pattern through time may be observed. These changes can be correlated with technological changes and apparent economic affluence or decline (as exemplified in structural additions during the railroad years, improved housing and commercial opportunities, decay and collapse of structures, etc.).

The non-specific information was gathered with reference to the wide regionally-based framework stipulated in the research design. Since much of the basic documentary groundwork was done by the previous reconnaissance study, the concentration has been on those sources needed to complete the documentation of specific sites and the sources needed to put the sites into a regional context. To accomplish this, regional studies of the political, economic, social, transportation, and environmental aspects of the area were consulted as well as general theoretical works in history, ethnography and oral history, anthropology, and archaeology. The latter theoretical sources are important to assure that this regional discussion contributes to the multi-disciplinary goals of preservation management.

The oral history portion of this investigation was aimed at accomplishing three goals: (1) providing specific information on the nature, extent, function, and history of a site to aid in interpretation and evaluation of the cultural resources, (2) to investigate the relationship between the contemporary population and the cultural resources in the MARGE project area, which implies gauging the significance and importance of the sites to the public, and (3) to examine the potential contribution of the oral history as a unique and significant source of information about human lifeways not obtainable through any other means of investigation. This last goal focuses on the nature of indirect impacts through a redevelopment



project of this nature where the population is certain to experience some shifting and alteration, thereby threatening the continuance of the East St. Louis oral tradition. As with other important resources in the project area, the oral tradition is evaluated in terms of local, state, and national significance, and recommendations are weighed relative to the impacts of the proposed project.

Individuals contacted during the oral history study included archaeologists and historians with interests in the area, long-term residents of East St. Louis, and employees of the various railroad companies. Notes were taken of all interviews and all formal interviews were taped and transcripts are being made.

## ARCHITECTURAL DOCUMENTATION

Architectural documentation is of six types: contemporary photo-documentation, historic photo-documentation, aerial photo-documentation, site plans, archival maps, and overlay maps. Contemporary photo-documentation consists of photorecording structural details using a 35mm camera, hand-held or mounted on a tripod. This is used on individual structures or structural details. Historic photo documentation is provided by old photographs in family albums or in the files of libraries, archives, and businesses. An attempt was made to provide historic photo-documentation whenever possible since it is an invaluable aid in determining period of construction, reconstructing architectural changes, and assessing use of structures. Aerial photo-documentation is an important aid in architectural studies since it provides information on spatial patterns and land use, as well as identifying transportation routes, all important in placing the structure in its proper perspective. Archival maps including plats, insurance maps, building plans, advertisements, etc. often contain detailed information on buildings and their function. In some cases corporate records contain building plans or valuation records at a detail far more accurate than can be accomplished through ad hoc field-measured drawings, especially when dealing with railroad property which has been closely regulated by the Interstate Commerce Commission and has subsequently been well documented. Overlay maps and site plans will include much of the information from the other documentary sources integrated with data from the historical research and archaeological testing. Recommendations for detailed documentation according to standards set by the Historic American Buildings Survey (HABS) will be made for those structures that meet the criteria for listing on the National Register of Historic Places unless the level of documentation afforded by this Phase II investigation has already met those requirements.

## ARCHAEOLOGICAL FIELD METHODS

Fieldwork is designed to recover the maximum information necessary to address the objectives of the general research design. Due to the large area encompassed by many of the sites, testing was extensive rather than intensive in order to gain a complete picture of the nature and extent of the archaeological deposits throughout the site.



Final determination of the location of the archaeological tests was based on the recommendations in the Phase I reconnaissance, the literature and map review, informant contact, metal detector survey, and probing. Excavation was conducted in hand-excavated five foot squares and machine excavated trenches that were generally three feet by ten feet. Machine excavation was used only in areas of deep fill and was supplemented by hand excavation as necessary.

All excavations proceeded by natural levels, except in cases where natural levels exceeded six inches in depth, in which case arbitrary levels of three inches were excavated. Obvious fill levels were sometimes removed as a unit depending on the nature and depth of the fill and its potential research value. Within levels, functional areas that were identified were removed as units and artifacts were identified and catalogued accordingly.

Excavated material was screened through  $\frac{1}{4}$ -inch mesh screen unless such action was obviously inappropriate. Material that was not screened included masonry rubble and surface trash deposits that have no relation to the last known use of any of the sites. All excavation and all artifact removal was accomplished within gridded systems oriented to a datum for each site and laid out prior to excavation. When removed, artifacts were bagged by provenience units, an association that was continued during laboratory processing and cataloging.

Maps of each site were produced showing all above-ground features: locations of grids, tests, and trenches; and any exposed subsurface features. The maps were tied in to the cardinal directions and, if possible, to permanent benchmarks. The English measurement system was used throughout the project, as is customary in historic sites archaeology.

#### GENERAL LABORATORY WORK AND ANALYSIS METHODOLOGY

Washing, sorting, and preliminary cataloging was performed in the field laboratory. Upon completion of field work the final cataloging and analysis was conducted in the Cincinnati office. The analysis proceeded within the framework of the research design. Further discussion of the specific research design on the site level will be included in the testing and results chapter (Chapter VI). This discussion of site-specific research objectives will follow the environmental, prehistoric, and historic overviews to enable the reader to become familiar with the background research that was an integral part of the formulation of the research framework.



### III. ENVIRONMENTAL SETTING

#### INTRODUCTION

The study of environment and its relationship to human lifeways has long been recognized as a productive interpretive framework for viewing culture. The systemic study of the interrelations between living organisms and their environment, known as the science of ecology (Odum 1963:3), has been found to be readily applicable to anthropological questions of culture. As Watson, LeBlanc, and Redman point out, an ecological view shifts "...major research efforts away from an emphasis on entities and toward a concern with relations. The artifact is no longer seen solely as an object with an importance of its own, but as a mediator between man and his surroundings" (1971:89).

Human societies, at all levels of complexity, are linked to the natural environment in a systematic or ecological relationship. This cultural/environmental system or relationship can be understood as the differential use of a total set of available organic and inorganic resources and the strategies employed for the exploitation of those resources. The various environmental parameters that define the set of settlement and subsistence choices of a particular group can be understood in terms of "niche", in biological terms meaning the place of a group in the total environment (Barth 1956:1079). However, the point of departure for the concept of human niche from the biological meaning of niche is the human variable of adaptation and technology, and a shift from the deterministic view of biology to the possibilistic view that environment sets limits that provide opportunities for the culture, but does not directly determine details of the culture (Watson, LeBlanc, and Redman 1971:92).

Climate is an important aspect of any study of human lifeways because it is the primary environmental factor affecting humans both directly and indirectly through its influence on other factors such as soil, vegetation, and fauna. The nature and composition of the climax vegetation is determined primarily by climate. Thus, climate is indirectly responsible for the character of a biome to which human communities must adapt. The various components of climate: precipitation, temperature, seasonality, wind and exposure, and length of growing season, permute and combine in different measure to provide a vast array of possibly suitable environments. Human utilization of and adaption to these varied habitats occurs differentially through time, space, and cultural complexity.

Any study of human-land relationships requires an understanding of the many aspects of the geographic environment. Butzer (1964) recognizes three subcategories that comprise analytic levels of human-environmental interactions: (1) regional environment, including climate, vegetation, soils, and geomorphic agencies, (2) regional food resource base, defined as the economic source area; (3) local setting, composed of factors affecting site selection, game movements, provision of aquatic resources and the impedence or facilitation of human movements. Butzer's analytic levels are readily applicable to historic human-environmental interaction as well, only at a higher level of economic organization. A complete picture of human interaction with environment requires good understanding of the nature and



configuration of the biotic/abiotic resource base on all three analytic levels.

Applying an environmental framework to the study of human lifeways, then, involves a synergistic approach involving a diverse array of sources, including geological, palynological, paleontological, archaeological, and historical studies, in an attempt to comprehend the various components of environment and the human place in the ecological system. For the East St. Louis metro area, we are fortunate to have many such studies to draw on for this environmental discussion. Though this overview is less than an exhaustive treatment of all the above disciplinary approaches to the study of environment, it is hoped that it can aid as a framework for formulation of research questions in the MARGE project area and suggest directions for further study.

### THE PALEOENVIRONMENT

In southwestern Illinois, as in the entire Midwest, the cooler temperatures of the Pleistocene epoch and the resultant ice sheets dominate the character of the environment. The Wisconsin Glacial, the fourth and final glacial epoch of the Quaternary, was the coldest of the four glacial periods with evidence of low temperatures extending even as far south as the Gulf region. It is the Wisconsin Glacial stage, dating from about 22,000 to 12,000 B.P., which is thought to have been in existence when humans first entered North America (Daugherty 1968:66).

A complete picture of the floral and faunal components of the glacial period environment can add much toward a better understanding of early prehistoric lifeways in the New World. However, the present status of Quaternary research permits only broad generalizations about the nature and extent of Wisconsin Glacial vegetation patterns and animal populations. The full glacial vegetation of Illinois was dictated by its geographical location and proximity to the ice mass. During the glacial maxima no portion of Illinois was very far from the glacial margin. This factor, in combination with the location of the state in a prime area of air mass conflict and storm generation, resulted in low mean temperatures and a boreal floral assemblage dominated by spruce (Daugherty 1968:66; Wright 1968:82). Though there is only sketchy data concerning the faunal components associated with the glacial environment, most investigators agree that megafauna such as mastodon, beaver, ground sloth, tapir, deer, muskox, and horse were present (Wood and McMillan 1976:75, 76; Parmalee and Oesch 1972:47-49).

The Valderan substage of the Wisconsin glaciation, beginning about 11,000 years B.P., marked the end of the glacial stage with a rapid warming trend in the mid-latitudes of North America (Parmalee 1968:104). As the mean annual temperature rose, pushing the ice margin north, the predominant boreal forest was invaded by the temperate deciduous elements such as oak and elm. This resulted in what Brown and Cleland term a mosaic distribution of floral associations into discrete biotic zones in response to climatic conditions and patterns different from those of today (Bryson 1965; Brown and Cleland 1968:114). It should be noted that the mosaic model proposed by Brown and Cleland is under some debate since many scientists hold that

the glacial vegetation maintained a zonal distribution, rather than a mosaic distribution, in front of the ice sheet in response to environmental conditions and trends similar to those of today (Martin 1958). However, the mosaic model provides an intriguing explanation for the persistent occurrence of both temperate and boreal faunal and floral elements in the same geographical regions, since such diverse biotic elements could be accommodated in the same geographic context within the discrete ecological zones proposed by the mosaic model.

Brown and Cleland hypothesize that the climatic conditions that continued during the Valderan stage eventually brought an end to the mosaic forest and ushered in the zonal vegetation pattern. The ecological disruption of animal species by this shift brought about the extinction of the Pleistocene megafauna that could not adapt to the shift (Brown and Cleland 1968:121). Whatever the environmental model preferred, most scientists agree that the boreal forest was invaded by deciduous elements during the warming trend of the Valderan substage resulting in displacement or extinction for much of the Pleistocene biota.

The Valderan substage of the Wisconsin glaciation was interrupted by an increased warming trend known as the hypsithermal or altithermal. The altithermal resulted in mean annual temperatures 2°C to 3°C higher than at present and conditions much dryer than previously (Geis and Boggess 1968:89). With conditions warm and dry, a prairie environment dominated by herbs such as Artemisia, Ambrosia, and Amorpha became established in the Minnesota area and pushed east invading the deciduous forest in Illinois. This expansion of the prairie into Illinois continued for several millennia until approximately 4,000 years B.P. (Wright 1968:85-87).

A reversal in the climatic trend followed the maximum prairie advance of the hypsithermal warming trend. Climatic cooling at the close of the hypsithermal (ca. 4000 years B.P.) combined with a trend toward a moister climate, and initiated a slow invasion of the prairie by deciduous hardwood species (Geis and Boggess 1968:89). Geis and Boggess propose that deciduous vegetation invaded the midwestern prairie from a base in the Appalachian region via stream and river valleys and steeper physiographic locations where erosion had already removed the prairie sod (Geis and Boggess 1968:92).

Many investigators have maintained that the prairie habitat was only a subclimax development with the natural tendency being for prairie to succeed to deciduous forest (Zawacki and Hausfater 1969; Geis and Boggess 1968; Wood and McMillan 1976). Citing many writers of the early historic period and early traveler's and settler's records, Wood and McMillan point toward the general tendency for prairie to be replaced by woody vegetation (Wood and McMillan 1976:32). Some scientists have pointed to human activity as a factor in early changes in vegetation patterns and trends. According to Curtis, the aboriginal human population could have drastically affected the environment in five ways: by changing the mammal population through hunting, by harvesting selected species of plants, by creating fields or gardens, by intentional or accidental introduction of plants or by moving plants from one habitat to another, and by using fire for hunting. Curtis believes that fire would have overshadowed the influence of all



others combined in prolonging the slow invasion of the prairie by deciduous forest (Curtis 1959:461, cited in Zawacki and Hausfater 1969:64).

#### ARCHAEOLOGICAL AND PALYNOLOGICAL EVIDENCE

The results of archaeological investigations can help to piece together the environmental developments and vegetation patterns for the Late Pleistocene and Holocene time periods. Such a data base does not permit a complete environmental reconstruction, but it does suffice to answer general questions about the nature of the environment on the basis of prehistoric subsistence and settlement.

The earliest prehistoric sites from which to draw environmental data near the American Bottoms are the Early Archaic occupations. Excavations at Graham Cave, Missouri, in the Early Archaic levels (dating to about 9500 years B.P.) revealed food material drawn primarily from a woodland environment, including "squirrel, deer, raccoon, turkey, ... opossum, skunk, mink, bobcat, muskrat, rabbit, mouse, large canid, and box turtle. Identified nuts include walnut, hickory, and hackberry" (Griffin 1968:131).

The oldest excavated occupation level in Illinois, at the Modoc Rock Shelter, has Illinois radiocarbon dates ranging from 11,200 years B.P.  $\pm$  800 to 4720  $\pm$  300 years B.P. (Fowler 1959:18-20). The earliest known food resources at Modoc were small mammals such as squirrels, rabbits, water-fowl, quail, and turkey. Fowler emphasizes that the variety of animal remains represents utilization of mixed woodland and some prairie (Fowler 1959:45). In addition, Parmalee (1959) identified in the lower levels of Modoc a terrestrial gastropod, Allogona profunda, which is now found further north, indicating that at the time of first occupation the area was more cool and damp than at present (Griffin 1968:131). Food remains indicate a hunting and gathering subsistence scheme utilizing woodland mammals and mast. These data suggest that during Early Archaic times (ca. 9000 B.P.), humans were occupying a deciduous woodland/ prairie environment in the Midwest, and were utilizing essentially modern fauna. This indicates that either the megafauna and other boreal biota were not utilized or that such boreal elements had pushed north with the warming trend and climatic shifts in the midwestern region. Most studies point to the latter explanation. In Pennsylvania, the change from boreal to temperate mammalian fauna is bracketed by radiocarbon dates between 9300 B.C.  $\pm$  1000 (Y-727) and 7290 B.C. (M-1291). The boreal fauna shifted north to Canada and within 4000 years changed in character to a modern assemblage dominated by caribou (Guilday 1967:231-232, cited in Griffin 1968:130).

Palynological investigations show a similar pattern. At the Brynjarfson Caves, Missouri, Parmalee and Oesch distinguish several distinct biotic assemblages for the midwestern region spanning the glacial/post-glacial period. "Between 32,000 and 25,000 years B.P. a mastodon-horse-muskox fauna occupied an open pine parkland during glacial times, whereas about 16,500 to 13,500 years B.P. a mastodon-ground sloth-giant beaver fauna existed in a spruce forest with minor deciduous elements" (Parmalee and Oesch 1972:42). For a boreal climate during late Wisconsin-early recent times, Parmalee and Oesch identify woodland muskox, moose, Pleistocene deer, red backed vole, and the dire wolf occupying areas "little,

if at all, affected by glacial fluctuations (Parmalee and Oesch 1972:47). Remains of fauna indicative of open short grass prairies or parklands are prairie chicken, badger, squirrel, pocket gopher, giant armadillo, flat-headed peccary, bison, and pronghorn (Parmalee and Oesch 1972:48).

The availability of fauna during prehistoric times is still quite difficult to determine today in the same way as flora (Roper 1979:81). Faunal investigations such as the Brynjulfson Cave study (Parmalee and Oesch 1972) provide some opportunity to draw analogies for areas exhibiting similar floral characteristics. A better understanding of both the evolution of regional environments and human adaptation to an ameliorating climate is provided by such analogies. For instance evidence exists that indicates the short grass prairie or parkland environment of northern Illinois provided for a primarily hunting adaptation closely related to the late Paleo-Indian or Plano sites of the western plains. The evidence for such an adaptation, the Starved Rock site in northern Illinois, has prompted some archaeologists to view the extension of the prairie to the east as being instrumental in the spread of late "Paleo-Indian" or Plano cultures in that direction (Willey and Phillips 1958:113; Krieger 1964:61). The dilemma of hunting and gathering occupations of Archaic Indians in the southern Illinois area (Modoc Rock Shelter, Graham Cave) roughly contemporaneous with the Starved Rock Plano hunting tradition can be resolved by viewing the two as local adaptations to very different environmental constraints (Griffin 1968:131-133).

Evidence of such disparate adaptations to varying environmental conditions and biotic resources during the transitional Paleo-Indian or late Paleo-Indian period has prompted many archaeologists to re-examine the old rubric of generalizing Paleo-Indian subsistence patterns as "Big Game" hunting. It is possible that there is more overlap between Paleo-Indian and Archaic subsistence strategies than originally thought. Perhaps Paleo-Indians spent as much or more time foraging and gathering or hunting small game as was spent chasing megafauna. In any case, however, it is not until Late Archaic times that the diversity of faunal and floral resources, as well as abiotic raw materials, can be seen to clearly influence subsistence and settlement schemes toward a mode that provides optimal exploitation of a variety of resources through seasonal scheduling of activities, specialized extractive sites, and settlement in ecotones where food species number and diversity is highest. Such a shift in economic strategy is known by various terms including local adaptation, specialized adaptation, foraging, and primary forest efficiency (Griffin 1968: 132).

#### PREMODERN ENVIRONMENT

In synthesizing various paleoclimatological data collected in the lower Illinois Valley, Zawacki and Hausfater provide evidence that suggests stability in the general climatic character over the last 4000 years (Zawacki and Hausfater 1969:62, 63). They do cite the occurrence of minor climatic fluctuations, however, but the effects of these are lenient in that they would serve to change the geographic but not compositional nature of the plant assemblages in the area. For information on the late prehistoric environment, Roper (1979:50-57), Wood (1976:206-208), and Benchley (1975:5-6) utilize federal land survey notes and early 19th century plats



to construct a map of the general distribution of premodern vegetation in the metro St. Louis area.

In the Mississippi River border, Roper (1979) found that bottomland prairie predominated. However, even though floodplain prairies are probably very important to prehistoric peoples, they are sketchily treated in the literature and early records (Roper 1979:61). In fact, before 1830 prairie land was considered worthless by early settlers. Other ecological zones, besides the predominant floodplain prairie, are assumed to have been exploited by aboriginal peoples in the American Bottoms. Zawacki and Hausfater (1969) have defined ten ecological zones within the lower Illinois Valley. Of these ten zones, five occur in the vicinity of the American Bottoms and the MARGE project area. These five zones include: Floodplain Prairie; Floodplain Forest; Floodplain Lakes, Ponds, and Sloughs; River Shoreline; and Hillside-Talus Slope Forest. Drawing from Zawacki and Hausfater (1969) and Kulfiniski (1973), these zones are described as follows.

The Floodplain Prairie is situated on the bottoms above the 410 msl contour level. Generally the prairie extended from the river to the Hillside-Talus Slope Forest occupying low-lying areas subject to seasonal inundation. Relative to other ecological zones, the Floodplain Prairie contained few potentially edible plant resources. However, wet spots in the prairie did contain sedges, marsh-elder, pinkweed, and blue vervain, which were utilized aboriginally.

The Floodplain Forest is found between the river and the prairie as well as along lakes and streams on the floodplain. This forest occupies low, seasonally inundated ground and also high ground near talus slopes. In this zone, plant food resources are available March through November. In terms of potential nut and acorn productivity this zone is less bountiful than either the Upland Forest or the Hillside-Talus Slope Forest vegetational zones.

Within the category of the Floodplain Lakes, Ponds, and Sloughs zone are found forest lakes and prairie lakes, each with a different vegetational assemblage. The forest lakes were surrounded by vegetation similar to the Floodplain Forest. This zone, however, had less diversity and a lower density of vegetation than the Floodplain Prairie Lakes. Within the Floodplain Prairie Lakes zone, food plants of major importance occurred in greater abundance and variety than in the Floodplain Forest Lake zone. The greatest plant food collecting potential in the floodplain, lakes, ponds, and sloughs occurred between September and November.

There is some evidence that the original composition of the Floodplain Lake ecotone was dominated by bald cypress. Porter's (1977:143) report of a bald cypress log in the Mitchell site at about 1100 A.D. and Fowler's (1962) find of a bald cypress log dating at about  $850 \pm 150$  A.D. indicate utilization of cypress during the Mississippian culture period. Schoenwetter (1962), using palynological evidence, presents findings indicating a climatic change about 1000 A.D. from a relatively hot and dry situation to a cooler and wetter climate. Kulfiniski attributes the southern vegetation shift of bald cypress to this climatic change (Kulfiniski 1974:X-1).

The River Shoreline zone is situated between two and six feet above median river level. This was an unstable habitat that supported pioneer plants and water tolerant annuals only. Included in this thin strip of land immediately adjacent to the river were woody and herbaceous plants documented as food sources. The majority of these plant resources was harvested between September and November.

The Hillside-Talus Slope Forest, of the ten vegetal zones defined for the lower Illinois Valley, contained the largest number of plant species. This zone is located at the base of the limestone bluffs in the Illinois uplands. The vegetation zone occurs not only along the bluff base talus slope, but along the slopes of the secondary valleys that dissect the uplands and drain onto the American Bottoms. This zone provides two periods of greatest natural plant food productivity: spring, when roots, tubers, and flowers are available and fall, when nuts and berries are ready to be harvested.

Because of the wide diversity of habitats or ecotones in this small area, a large assemblage of faunal species would also be present and often available for utilization concurrent with the seasonal and spatial dispersion of floral species (Parker 1974:X-1). Much of what is inferred about available faunal resources is based on analysis of excavated remains at prehistoric sites in the area and on known ranges and habitat preferences of certain organisms (Parker 1974; Parmalee 1968, 1973; Bellrose 1968).

Roper (1979:73), citing work done by Parmalee, Paloumpis, and Wilson (1972), notes that certain aquatic resources contributed a significant portion of Illinois Woodland diet. Fish and shell are both abundant at some sites; however, she speculates that mussels never provided more than a dietary supplement. Parmalee states that species composition of fish reflects extensive use of quiet backwater sloughs and ponds rather than river or stream environments as a source of fish (1973:49).

Birds formed an especially significant part in the food economy with turkey and migratory waterfowl predominating (Parmalee 1968:109). Faunal remains from the Kane Village site (Ms194) in Madison County, Illinois indicate that half of the avian species were birds associated with an aquatic environment (Parmalee 1973:49). The presence of turkey and prairie chicken remains at this site indicate the occurrence of upland hunting as well (Parmalee 1973:49). Roper's (1979:70) summary of avian data from central Illinois indicate that 19 aquatic, 2 prairie, and 1 forest utilized species were available in greatest variety and density in spring and fall.

Mammals provided basic subsistence for all prehistoric groups. White-tailed deer contributed the greatest portion of the faunal diet, but raccoon, muskrat, beaver, squirrels, and mustelids were also utilized (Parmalee 1968:110). Bison, extensively exploited in the central and western plains, were in the Illinois area no earlier than A.D. 1600 and were extinct here by A.D. 1800 (Parmalee 1968:111).



## THE HISTORIC ENVIRONMENT

By the time of the early European explorations and subsequent establishment of settlements in the St. Louis region, the local environment had undergone vast changes in the several hundred years since the last major occupation of the Cahokia Mounds site during the Sand Prairie phase (A.D. 1250 to 1500). The decline of Cahokia as a hub in the major market system of the region and "a return to the simpler more individualistic redistribution system of Woodland people" (Porter 1977:162), which Fowler calls "a re-adaptation to the subsistence pattern of mixed bison hunting and agriculture" (Fowler 1977:9), would probably be accompanied by land abandonment and old field succession. We know that at least by the recent historic period (ca. A.D. 1700) the Cahokia site had been completely abandoned for some time and was unknown to the French living in the area and of no importance to the historic Indians (Fowler 1977:5-10).

Early accounts of the area indicate that the American Bottoms was mixed prairie and deciduous woodland by this time. Collot's 1796 map of the Mississippi River showing the French occupied territory from St. Louis to Kaskaskia is the most detailed map of the late 18th century. Oddly, it does not show the Cahokia Mounds, though it does indicate prehistoric mounds labelled "Indian Ancient Tombs," which Fowler identifies as the Lunsford Pulcher site (Fowler 1977:6). The map indicates expanses of prairie near the French village of Cahokia and a large expanse of prairie between two streams further north. Closer to the river, where present day East St. Louis is located, the terrain is labelled "dry when the waters of the Mississippi are low" and "banks low and flat."

Ethnologist, Henry R. Schoolcraft, wrote of Illinoistown in 1821 while traveling to St. Louis. He observed that the road from Belleville "is carried for a distance near the brow of the bluffs, and frequently presents the most extensive and interesting view; it then descends through a lengthened chasm, down a winding and romantic path, occasionally overhung with rocks and trees, into the alluvial tract whose western boundary is the channel of the Mississippi. This tract, so well known under the appellation of the American Bottom, consists partly of prairie and partly of forest, the latter being chiefly confined to the margin of the river...the very considerable portion of it (American Bottoms) which still remains unimproved, and the extreme flatness of the surface renders a ride across it, less pleasing and interesting than would be expected, as the views are generally confined, and there is no prospect of the Mississippi until you arrive within a hundred yards of its current" (Schoolcraft 1825:223-226, cited in Bond 1969: 13, 14).

S.A. Mitchell, commenting on the American Bottoms in 1837, observed much the same vegetation as Schoolcraft:

"the bottom is 80 miles in length, and comprises an area about 450 square miles, or 228,000 acres. On the



margin of the river is a strip of heavy timber, with a rank undergrowth: This extends from a half to two miles in width, and thence to the bluffs is generally prairie" (Mitchell 1838:18, cited in Bond 1969:2).

The early historical evidence of American Bottoms vegetation indicates that the original vegetation zones were still recognizable in the early 19th century though they probably had experienced some change in composition. The prairie zone, deciduous bottom land forest zone, and wetland communities were still evident as late as 1838. It was not until growth of Illinoistown and East St. Louis, and subsequent agricultural activity and lumbering that the biotic composition would be changed irreversibly. As Kulfinski (1974) notes: "During the decade that followed (1840) 96 percent of the (State) prairie area was settled by 300,000 people, creating a demand on forests for housing, firewood, fence posts, fence rails, etc. By 1855, white pine lumber importing made local forests less necessary and clearing of Illinois forest, for agricultural purposes followed the decline in value for timber" (Kulfinski 1974:X-27). The rapid urbanization and industrialization of the East St. Louis area was accompanied by construction of levees and drainage ditches and the filling of large expanses of bottom-land and lake during the latter part of the 19th and the 20th centuries. This practice has erased virtually all remnants of the original vegetation and fauna.

#### AMERICAN BOTTOMS MORPHOLOGY AND HYDROLOGY

In order to fully understand the late prehistoric and historic settlement, it is important to consider the local geological variables and landform changes that have been closely related to the climatic developments previously discussed. As Evans notes, "geology and landforms are the media through which climate operates. On a local scale, topography, especially in areas of marked altitudinal contrast, is important" (Evans 1978:5). Landforms provide environmental variability and often determine the boundary between ecotones. Physiographic regions and specifically topography control routes of travel, communication, and migration, as well as providing various settlement situations. Other geological resources include the differential distribution of raw materials utilized in the manufacture of tools and weapons.

In the MARGE project area, the Mississippi River is the most prominent physiographic feature. Its trough is of considerable age and contains till from the Kansan glacier indicating that the river maintained its present course at that time (Fenneman 1909:58). Fenneman (1909) further maintains that the ice sheet advance did not play a significant role in shaping the present surface. The Wisconsin stage produced the final glacial advance in which the southern edge of the ice flow stopped about 75 miles north of the project area (Yarbrough 1973: II-6). However, the Mississippi, as well as the Illinois and Missouri Rivers, acted as sluice ways for the glacial meltwaters.

As a result of the overloading caused by glacial outwash, the river began to aggrade to a level almost 50 feet above the present floodplain (Yarbrough 1973: II-6 ). This aggradation resulted in the formation of

several important features. Fenneman (1909:62) argues that the natural genesis of the base of Monks Mound and nearby mounds occurred through processes of erosion and dissection operating on remnants of former high-level meander terraces. However, Nelson Reed notes that core borings reveal human activity all the way down to sterile sand beneath the mound indicating that Monks Mound, at least, was entirely of human construction (Reed 1977:31). The higher outwash particles of these high terraces were picked up and redeposited as loess on the Illinois bluffs by westerly Wisconsin winds (Yarbrough 1973: II-3). These deposits reach a depth of 50 feet in some areas along the bluff and "decrease in depth and ruggedness as distance from the river increases" (Benchley 1975:5). It is the deposition of loess soils on the eastern bluffs that softens the transition between floodplain, talus slope, and upland till plain.

An important factor in the configuration of the Mississippi River through time is the geologic substrata of the drainage basin. North of Alton and south of Dupou the bluffs are composed of hard Mississippi limestones, but in between, softer Pennsylvanian coals and shales predominate. It was this softer bed that allowed the early Mississippi River to cut an eleven mile-wide floodplain a distance of 23 miles between Alton on the north and Prairie du Pont Creek on the south. The floodplain on the Illinois side, known as the American Bottoms, averages about seven miles wide.

Fenneman (1909:64) describes two types of soil found in the American Bottoms area. In the uplands modern soils have developed from Wisconsin-deposited loess or in some places from Roxana silt (Yarbrough 1973:II-12). On the other hand, the floodplain soils are derived from alluvial deposits. In the MARGE project area, soil of the "Cahokia Alluvium formation, consisting of silts, clays, and interbedded sand lenses, is the most recent of two alluvial soils on the American Bottoms" (Yarbrough 1973:II-4).

Peoria loess was deposited in the Illinois uplands during the period from 20,000 to 7,000 years B.P. (Yarbrough 1973:II-12). This redeposition of Wisconsin-age outwash from the floodplain to the uplands may have contributed to the deflation of some floodplain archaeological sites and the aggradation of others situated in the uplands. Cahokia alluvium was primarily transported and deposited by agent of the Mississippi River. However, Yarbrough notes that some of the surface alluvium was deposited by tributary streams extending from the bluff area and that have accumulated in depths ranging from ten to fifty feet thick (Yarbrough 1973: II-13). It would be possible then that certain prehistoric archaeological sites, especially those in close proximity to riverine resources, could be buried under several feet of alluvium.

To the extent that archaeological sites were dispersed over a number of available ecotones through time, and subject to varying shifts in glacial loess, alluviation and colluviation, it is difficult to confidently evaluate potential site occurrence without consideration of the natural forces that may have directly influenced both site occurrence and site preservation. Such an evaluation is complicated further by the Mississippi River and the effects (both direct and indirect) on the floodplain by the meandering channel.



This seven-mile width of floodplain is marked throughout by a number of extinct river channels in various degrees of filling that resulted from meanders of the Mississippi River over several millenia. Since the sequence of formation for meander loops is well understood and many American Bottom meander loops are associated with datable archaeological sites, Munson (1974) has been able to determine chronological placement of meanders by their association with diagnostic cultural remains. Of the 24 extinct meander loops within the floodplain of the American Bottoms, we will consider specifically only those within the MARGE project area. These include Spring Lake, Jones Park, Chouteau Slough, Gabaret Slough, Dead Creek, Horseshoe Lake, and Cahokia Slough.

Munson has been able to determine that some meanders were parts of a single extinct channel. For example, Spring Lake and Jones Park are part of a channel segment with a cutoff date of pre-2800 years B.P. The Chouteau Slough, Gabaret Slough, and Horseshoe Lake meanders are a portion of channel with a cutoff date of pre-900 years B.P. Later this channel extended to Dead Creek with a cutoff date of about pre-275 years B.P. (Munson 1974:388-391). The Horseshoe Lake meander has a cutoff date of around 900 years B.P. based on the location of Late Woodland and Early Mississippian period sites located on the outside margin or cut-bank side of this meander. The cutoff date has to agree with the chronological placement of these prehistoric sites because lateral movement common to an active channel had to have ceased in order to account for these sites adjacent to the cut-bank (Munson 1974:388; Bareis 1964:89).

A better understanding of the hydrological and morphological phenomena acting on the American Bottoms in addition to paleo-environmental data can add an increased dimension to the study of prehistoric cultures in the area. Not only does it provide insight into variables affecting pre-historic settlement, subsistence, and transportation, but also provides a framework for evaluating the potential for the location and preservation of as-yet unrecorded sites in areas of the American Bottoms that have not been systematically surveyed. The distribution of these extinct meander scars within the MARGE project area provides the opportunity to both test and refine the work of Bareis (1964) and Munson (1974), and to design problem-oriented archaeological investigations in order to most economically investigate morphologically stable areas for evidence of buried sites that may not be evident on the surface. More will be said about a research plan for investigation of prehistoric sites in the MARGE project area in later sections of the report.

The historic populations of the American Bottoms can be studied in terms of interaction with the hydrology and morphology as well. This interaction has two manifestations. First, the historic population will prefer certain hydrological and morphological situations in order to optimize location near transportation routes and to minimize potential for flooding. In some cases, the transportation and economic situation can override the criteria of erosion and flooding as will be demonstrated in the historical perspective. In that case, the human-land interaction can be viewed in respect to the nature and extent of historic technology brought to bear on the conflict and the success relative to the interplay between natural forces and human aspirations. This brings us to the second manifestation, which includes the terraforming activities and/or adaptation of

historic populations to local hydrology and morphology. Relative to these two manifestations in both prehistoric and historic populations, the MARGE project area can be divided into three areas based on geologic origin, soils, and typographic patterns: the Lake Region, the East St. Louis Rise, and the Ridge and Swale Region (Yarbrough 1974).

The Lake Region covers most of the southern half of the American Bottoms and is made up of recent oxbow lakes and marshy meander scars dissected by the East St. Louis Rise. However, modern drainage projects, groundwater pumping, and concentrated land filling have removed all of the major water bodies within this region except for Horseshoe Lake in the northern region. In this area the landforms are the result of old river channels and "soils vary...with sand bars and swampy clay materials arranged in alternate fashion" (Yarbrough 1974:22). Throughout this region the rail lines, as usual, follow the topographic highs (Yarbrough 1974:22).

The East St. Louis Rise is a roughly "Y" shaped dissected alluvial fan extending from the bluffs on the east to the Mississippi River on the west. The East St. Louis Rise is shaped and defined by Horseshoe Lake and the Spring Lake meander to the north and the Goose Lake meander scar to the south. The rise is divided into north and south limbs of the "Y" by the Jones Park meander (better known as the Grand Marais or Pittsburgh Lake). This region contains the largest population and greatest number of industrial facilities in the American Bottoms (Yarbrough 1974:21). It is the north limb of the "Y" that diverts Cahokia Creek from its southern course to the west along the river. It is at the base of the "Y" configuration that the East St. Louis Mississippian site was located.

The Ridge and Swale Region is located west of the Lake Region and the East St. Louis Rise. Contour lines and soil data are oriented lateral to the River as opposed to the east-west lineation of the meander scars in the Lake Region. The formation of the Ridge and Swale Region is related to relatively recent alluviation by the Mississippi River. During its development it was a region of swamps, partially filled water courses, active sloughs, natural levees, and sand bars (Yarbrough 1974:19). It was this narrow region along the Mississippi that was the spearhead of historic settlement and capital investment in the late 18th and 19th centuries. Control of this area was vital to business interests operating primarily within the transportation sector of commerce, and the morphologically dynamic aspect of this area resulted in the evolution of some important corporate landholdings and land uses that would strongly influence the development of East St. Louis.

#### CONTEMPORARY SETTING

The St. Louis/metro-East area is the largest industrial and population concentration on the Mississippi River floodplain north of New Orleans. As a result, a major part of the MARGE project area is urban land, covered with late 19th and 20th century fill and used by the railroads for their tracks, yards, freight depots, repair shops, and roundhouses. Other areas in the project area are residential or abandoned. In contrast, large portions of the area subjected to reconnaissance are agricultural. More detail on the contemporary setting of the project area is included in the historical perspective (Chapter V), and in the testing (Chapter VI) and survey (Chapter VIII) sections.



#### IV. PREHISTORIC BACKGROUND

##### PALEO-INDIAN (PRIOR TO 8000 B.C.)

Archaeologists speculate that the initial foray by humans into the New World, across the Bering land bridge, may have occurred as much as 40,000 years ago. However, the evidence to support this speculation is still inconclusive. In the northeast the earliest Paleo-Indian material is found at the Meadowcroft Rockshelter in Pennsylvania with a radio-carbon date of between 14,225 B.C. and 11,300 B.C. (Adovasio et al. 1975). Two deeply stratified sites in southern Illinois, Koster (Houart 1971) and Modoc Rockshelter (Fowler 1959), have yielded dates commencing about 5100 B.C. and 8,000 B.C. respectively. These dates are in line with the conventional hypothesis concerning human entry into the Midwest on the heels of the last Wisconsin glacial advance.

There is one bit of evidence offered by Munson and Frye (1965) to substantiate the claim for a greater antiquity of human occupation in the area. They have reported on the occurrence of a single chert artifact exposed 18 feet below the surface by a road cut in Fulton County, Illinois. The artifact was embedded in a layer of Roxana loess the age of which has been placed at 35,000 to 40,000 years B.P., thus constituting the earliest evidence for human occupation in this part of the country. Griffin (1968:124), however, raises questions concerning contextual, stratigraphic and raw material aspects of the report that caution ready acceptance of this very early date. He feels that certain secondary or erosional processes may have transported this single artifact from a superior, and therefore later, position to its eventual deposition in the earlier Roxana loess.

The majority of Paleo-Indian artifactual evidence has been gathered from surface collections throughout the area. Smail (1951) published information concerning a collection of 232 fluted points from the St. Louis area. Griffin (1968:124-125), in summarizing the collection, notes that the majority of the fluted points resemble the early and large Clovis type, but that Smail's data are not detailed enough to provide adequate locational information. Reference to a particular artifact in Smail's (1951:13) collection is made by Munson (1971:4) with regards to the presence of Paleo-Indian material in the American Bottoms. He reports that a Clovis point was found on the Cahokia Village site, northeast of Monks Mound, but suspects that its occurrence there was a result of collection and redeposition by later Mississippian people at that site.

Paleo-Indian sites are reported from the American Southwest to Nova Scotia with very little interregional variation in their cultural materials. The Paleo-Indian cultural tradition in the Midwest has been recognized as part of a widespread homogeneous New World culture typified by a distinct lithic artifact assemblage. Most of what is known about this region's earliest cultural development must be inferred from sparse surface recoveries of these lithic artifacts, particularly the diagnostic fluted points (Prufer and Baby 1963; Dorwin 1966; Winters 1963; Smail 1951). When this information is analyzed in conjunction with geochronological and paleoecological data, certain generalized assumptions about the earliest post-Pleistocene adaptations can be made.

The Wisconsin stage produced the final glacial advance of the Pleistocene with the leading edge of its southern limit coming to a halt about 75 miles north of the MARGE project area (Yarbrough 1973:6). As the ice sheet began to retreat, the Illinois, Missouri, and Mississippi Rivers served as sloughways for the melt waters. As stated in the previous chapter, the overloading caused by glacial outwash resulted in an aggradation to a level almost 50 feet above the present floodplain (Yarbrough 1973:6). Munson (1974:387) argues that the ongoing geologic processes that have aggraded, eroded and dissected the American Bottoms are responsible for the lack of Paleo artifacts on the floodplain. Furthermore, he suggests that the floodplain surface was still being formed at least 2800 years B.P. Since the disruptive action of the floodplain formation would have erased all traces of earlier cultures, ie. before 2800 B.P., this would explain the emergence of Late Archaic artifacts as the earliest prehistoric remnants intact on the American Bottoms.

Sites from the time period prior to 8,000 B.C. are reflective of areas where small groups of people would perform specific tasks over a very short duration. The evidence for human behavior, defined by these narrow parameters, is very fragile and, except for extraordinary circumstances, goes unrepresented in the archaeological record. Thus these sites occupy a very low profile across the landscape. In the Midwest and Northeast, Paleo sites are typically located on hilltops and bluffs overlooking open portions of main river valleys and larger tributary valleys, and frequently occur at the confluence of rivers on high Wisconsin terraces. Benchley's synthesis of archaeological data from the St. Louis area confirms this settlement strategy, and notes that all of the 11 identified Paleo sites are situated in upland areas (Benchley 1975: 33).

The exploitation of large mammals with the occasional supplement of gathered foods typifies the Paleo-Indian subsistence base. Brown and Cleland (1968) suggest that the uplands may have been borderlines between microenvironmental biomes. Biomes are units of ecological space composed of unique and complimentary constituents that are specifically adapted to the environment of that space. The borders, or ecotones, of various biomes provide a rich diversity of floral and faunal species, and are areas which are most prolific for mammals. Since Paleo-Indian subsistence strategies are based primarily on hunting mammals, these upland borderlines would have provided an optimum setting for procurement camps. The lack of intact evidence for Paleo-Indians on the American Bottoms can be attributed to two factors: the nature of their subsistence strategy would have emphasized occupation of the uplands, and the energetic geological processes at work within the drainage basins at that time would have erased the fragile evidence of their existence.

#### EARLY ARCHAIC (8000 B.C. - 6000 B.C.)

The narrow bands of tundra that followed the retreating Wisconsin ice sheets were rapidly invaded by primary plant communities. The early dominance of boreal fir and spruce was gradually replaced by temperate deciduous trees, which in turn subsided as the Midwest acquired the structure of a savanna (Wright 1968:83) approximately 7000 years ago



(Geis and Boggess 1968:90). In an application of Quaternary climatological and palynological data, Brown and Cleland (1968) postulate that early post-Pleistocene biotic communities were not zonal, but mosaic in nature, and that the Early Archaic is an adaptation to the rather recent zonation of floral and faunal assemblages. The zonation of the biotic communities would present Early Archaic groups with certain specifically-adapted groups of flora and fauna occupying broad regions. This consolidation of resources into area-specific zones would have allowed Early Archaic groups to schedule the procurement of subsistence items as they became available. This type of strategy would not have been possible in a mosaic environment where resources occurred in undifferentiated and thus more random locations.

The division between early fluted point hunters and hunter-gatherers in the Early Archaic is a purely arbitrary one (Griffin 1978:226). Yet, as the time dimension increases, typological comparisons of artifact assemblages point towards a distinction between the Early Archaic component of the northeastern United States and cultures occupying the same time period in the Plains and the Southeast. For example, biface choppers are known from the Southeast, but are absent in the Northeast, and ground stone tools, like adzes and grooved axes, are part of the lithic assemblage present in the Northeast, but absent in the Southeast (Funk 1978:24). Artifactual material representing the Archaic in the American Bottoms is scant and does not exist in tight stratigraphic context. Therefore, the information from this period must be taken by analogy from nearby regions where data from controlled excavations are available.

Evidence from Graham Cave (Logan 1952) in Missouri and Modoc Rock-shelter (Fowler 1959) in Illinois indicate that Kirk, Le Croy, and Stanley point types are diagnostic of the Early Archaic in this area. These sites have also provided faunal remains that indicate a subsistence strategy adapted to forest or mixed forest and prairie habitats (Logan 1952; Fowler 1959:45). Other than the most general assumptions, little is known about behavioral variables during the Early Archaic (Kelly et al. 1979:18).

Dragoo (1976:11) notes that even though the tool assemblage reflects a diversification in the subsistence base, indications are that plant food preparation and fishing played a minor role. Occupational preferences seemed to have centered on the uplands. Sites tend to be small and scattered, limited to surface discoveries and usually located in uplands near secondary stream valleys (Benchley 1975).

For the American Bottoms, Harn (1971:24) found no Early Archaic projectile points during his survey nor in private collections from within the area. Munson (1971:5) reports finding one Early Archaic St. Charles point on the high Wood River terrace in Madison County, Illinois. The FAI-270 intensive survey (Kelly et al. 1979:18-19) reports the location of three Early Archaic sites in the American Bottoms. All the sites are located on formations associated with former meanders and consist of single artifacts occurring in concentrations of later period material. At the Labras Lake site the Early Archaic component is not realized in excavations that revealed an exclusively Late Archaic occu-

pation (Phillips et al.1980:111). Furthermore, because of the frail nature of the data base, Munson's caution (1971:4) concerning the depositional nature of a single diagnostically early artifact within a later temporal context should be taken here.

There is some evidence that may serve to explain the absence of intact archaeological sites prior to the Late Archaic in the American Bottoms. Both Munson (1974) and Griffin (1968:132) suggest the possibility that the floodplain in this area was still undergoing formation. Munson's argument is based on inference derived from the relationships between known sites and their locations on successive Mississippi River meander scars. Griffin, citing Frye et.al (1965:12), states: "In the American Bottoms near Horseshoe Lake, a standing stump 50 feet below the surface was dated at 6600±200 B.P."

#### MIDDLE ARCHAIC (6000 B.C. - 4000 B.C.)

During the Middle Archaic, the spatial boundaries of aboriginal expansion reached their limits in the northern interior and along the Atlantic coast. The diversification of subsistence-related activities increased and an emphasis on the exploitation of seasonal resources began to grow in importance. Specialization in certain activities generated a more complex social structure within the band network as evidenced by what Griffin (1978:229) calls the early indication of "status differentiation among the band members."

A shift toward the more intensive utilization of localized resources enhanced the need for increasing stability in occupational strategies as well. In the Illinois Valley, base camps with habitation structures make their entrance into the archaeological record at the same time that there is some evidence for the use of specific floral resources (Houart 1971).

The material remnants of Middle Archaic culture expanded to reflect the increasingly sophisticated technology adapted to the intensive exploitation of forest and riverine biomes. Additional tools include the full grooved axe, winged and cylindrical bannerstones used as atlatl weights, and a bone tool industry (Griffin 1968:133). Harn (1971:24) reports that Archaic peoples used local cherts, usually a white fossiliferous, high grade chert, with few exceptions.

Previous work in the American Bottoms indicates that Middle Archaic sites, like Early Archaic and Paleo sites, are scarce to nonexistent on the floodplain, and that the few upland sites occur primarily as sparse surface scatters (Harn 1971; Munson 1971; Benchley 1975). Because of the collective nature of their observed Archaic materials, Harn (1971) and Munson (1971) do not make temporal refinements within the broader Archaic context. Therefore, the incidence of Early, Middle and Late Archaic components cannot be assessed for their surveys. In 1975, Benchley (1975:19) noted that no Middle Archaic sites had been identified for the St. Louis area. Recent work by Denny (1973 and 1974) and Kelly et al. (1979) has identified a total of four Middle Archaic sites in the bottoms. However, the identifications are based upon scant



surface recoveries, and Kelly et al. (1979:19) caution interpretation of the data without regard for its depositional context.

#### LATE ARCHAIC (4000 B.C. - 1000 B.C.)

Increased adaptive specialization to regional and local environments began to generate regional cultural variation during the Late Archaic. Southwestern Illinois lies within what Tuck (1978:28) describes as the interior-riverine Archaic area. This area includes many diverse ecotones that occur at the interfaces between two distinct environmental zones: the prairie and the hardwood forest. The eastern prairie peninsula, which juts off the main body of the central plains prairie, extends across Illinois through Indiana and into parts of Ohio. The drainages within the prairie provided productive margins that served as the main avenues for the gradual invasion of deciduous forest. Pioneering oak and hickory species were most successful in physiographic areas where erosional regimes undermined the fragile prairie sod (Geis and Boggess 1968:92-94). The various ecotones provided by this mixed forest, prairie, and riverine environment provided rich, diverse floral and faunal resources, as well as various topographical situations that generated a myriad of occupational and extractive situations during the Late Archaic. For the St. Louis area Benchley (1975:33) states that: "Archaic sites occur in all topographic settings except for the bluff face along the major river bottoms."

It can be assumed that cultures prior to the Late Archaic incorporated some seasonal patterning into their subsistence strategy. However, the scheduling of variously available resources climaxed during the Late Archaic, the trend being towards greater efficiency in the exploitation of plant and animal resources. This tendency culminated in the Late Archaic with what Caldwell (1958) defines as "primary forest efficiency. Essentially this was described as a complete and effective adaptation to and utilization of a forest-edge environment.

Late Archaic sites are characteristically of large size and represent occupations over long periods of time. The settlement systems during the Late Archaic reflected the need for changing locational criteria as a response to seasonal resources. During the spring and summer, the exploitation of shellfish, fish, turtles, migratory birds, and other aquatic resources produced sites that occurred as concentrations on low Wisconsin terraces a few hundred feet from the river. The fall harvest of nuts and vegetables took place at sites that can be characterized as small camps on slight knolls. Winter camps were situated above the valley proper for the effective exploitation of upland game such as deer, other mammals, and birds.

Winters (1969) has identified a settlement system for the Riverton culture in the Wabash valley that describes sites as being dispersed in a linear pattern along river margins with distances of 10 miles separating major loci. More specifically, "Late Archaic base camps, or settlements, are located on a major stream or river at a point where a navigable tributary joins the main channel, with hunting camps located along the tributary or tributaries" (Winters 1969:129). This pattern, which

Winters believes is antecedental for later Woodland settlement systems, is considered by Dragoo (1976:12) to be widely distributed both in time and space during Middle and Late Archaic times. It should be noted, though, that shell middens, which have a central role in the Riverton culture settlement pattern, are lacking in the project area (Kelly et al. 1979:21).

Within the context of the American Bottoms vicinity, the Late Archaic sites occur in a variety of physiographic zones: floodplain, low terraces, ridges of river and stream valleys, as well as in the uplands. It is in the uplands of Illinois that the majority of sites are located (Benchley 1975:33). However, it is also within the Late Archaic time frame that sites are found upon the floodplain. Synthesizing information from Munson (1971:5), Harn (1971:22-24), Kelly et al. (1979:19-23), and Benchley (1975:33), it appears that on the floodplain most sites are found in the northern half of the American Bottoms. In general, though, Archaic sites are situated near the bluffs in the uplands, on levees and terraces on the bottoms near large, permanent bodies of water including lakes and swamps, and at "water's edge" below natural levees. Of these locations, sites most frequently occur on terraces bordering large permanent bodies of water.

Base camps are restricted to a bluff base proximity in the vicinity of floodplain lakes. These sites, which represent semipermanent, recurring occupations, are characterized by a diversity of tool types (Kelly et al. 1979:22). Munson (1971:5) describes a Late Archaic site, which he categorizes as a "village," as being "located on a sandy, talus slope-terrace near the base of the bluff at the point where Cahokia Creek enters the American Bottoms." Its artifact assemblage included a large number of manos, projectile points, knives, scrapers, drills, choppers, hematite plummets, and grooved axes. No pottery was recovered.

The MARGE project reconnaissance located 20 prehistoric activity loci. Cultural competency was difficult to assess for these loci because of the almost complete lack of diagnostic artifacts. Of the 20 prehistoric loci, 11 were identified on the basis of non-diagnostic lithic artifacts unaccompanied by ceramic sherds.

The maximization of particular resources in increasingly refined environmental zones generated an adaptive specialization that is manifest in the diversity of interregional cultural variation. Since the American Bottoms occur within the vicinity of several broad physiographic zones, it has been suggested that this area served as an interface between several regional cultural traditions or complexes (Benchley 1975:20; Kelly et al. 1979:19-23). As an area of intergradation between variously adapted cultural systems, the bottoms would serve to focus the diversification of interregional variation. The provision of a synthesis between these sets of cultural alternatives would yield a stable base (Hardesty 1977:44) on which the later Woodland florescence could be built.



## EARLY WOODLAND (1000 B.C. - 100 B.C.)

During the Late Archaic, Griffin (1978:23) notes that there was "considerable evidence for the long distance movement of goods." The interregional structure of traded goods provided a network capable of organizing the transmission of information as well. It is at this point in the development of the aboriginal Midwest that crudely fired pottery makes its appearance. It is the adoption or invention of ceramic vessels that arbitrarily marks the transition between the Late Archaic and the Early Woodland culture periods. Other characteristics that serve to distinguish Terminal Archaic from Early Woodland cultures are not readily apparent (Tuck 1978:39).

Traits that were once believed to have been indicative of Early Woodland are now known to have long histories in the Archaic (Dragoo 1976:16). Burial practices, which formed the core around which Early Woodland mortuary complexes evolved, were extant throughout the Archaic and persisted into the Early Woodland (Griffin 1968:133-134). Evidence that the Early Woodland diet was supplemented by domestication of various native and non-native cultigens, like sunflower and chenopodium (Struever and Vickery 1973:11-19), might be amended to note its antecedent in the Archaic (Yarnell 1973).

Mortuary ceremonialism, which became manifest in various regional climaxes during the Early Woodland and culminated in the spectacular Hopewell Tradition also probably had its antecedents in the Archaic. The Adena culture represents the climax of Early Woodland mortuary ceremonialism in the central Ohio Valley. Whereas, the Black Sand phase within the southern portion of the Prairie Peninsula (Roper 1979:35) is defined on the basis of ceramic material that immediately precedes Initial Havana [Middle Woodland] (Struever 1968:146).

In terms of settlement patterning, there is little evidence to indicate major changes in early Adena settlement patterns or in population size for the preceding Archaic (Dragoo 1976:18). However, Black Sand components (500-150 B.C.) occur almost exclusively within the Mississippi and Illinois River valley trenches. This is a major shift in settlement pattern from the upland Archaic sites (Asch et al. 1979:80).

Early Woodland sites are poorly represented in the American Bottoms (Munson 1971:6; Harn 1971:24). Even throughout the Midwest, the Early Woodland is poorly represented and thus poorly understood (Benchley 1975:20; Farnsworth 1973:18). Dragoo (1976:18), offering a possible explanation for the lack of recorded sites, notes that there are many Early Woodland sites known to be present 6 to 8 feet below the current floodplain surface in the Ohio Valley. However, if this information is going to serve in part as an explanation for the lack of Early Woodland materials, then it must be assumed that Early Woodland sites were situated in areas that made them more vulnerable to alluvial deposition than sites of earlier and later time periods.

In contrast, the Historic Sites Survey (Lindner et al. 1975) recorded 13 Early Woodland sites near a single component Marion culture (Munson



1966:9) occupation near the bluff base on the American Bottoms in Monroe County, Illinois. The FAI-270 intensive survey (Kelly et al. 1979:23) reports finding 10 additional Marion culture sites representing a "flood-plain occupation zone between Prairie du Pont Creek in St. Clair County and Long Slash Creek in Monroe County."

#### MIDDLE WOODLAND (100 B.C. - A.D. 300)

The Middle Woodland represents a period of complex sociocultural integration across regional boundaries via networks of trade. This concept has been described as the Hopewell Interaction Sphere by Caldwell (1964) and Struever (1964). The designation "Hopewell" is applied to a particular archaeological assemblage that has been found from western New York to Kansas City and from the Gulf of Mexico to Lake Huron. Griffin (1978:246) recognizes two dominant complexes or focal areas existing during the Middle Woodland: one, known as Hopewell, in southern Ohio, and the other, comprising the Havana societies, in the Illinois River valley and adjacent areas. Both are regarded as Hopewell, but the Ohio focus, a culmination of Late Archaic and Early Woodland trends, is much more dramatic and elaborate in terms of stylistic traits, mortuary ceremonialism, and complexity of earthworks.

The Illinois Hopewell seemed to have interacted more closely with cultures in the lower Mississippi Valley than did the Ohio Hopewell and, because of its physiographic setting, southern Illinois "had a much different series of Middle Woodland societies" (Griffin 1978:252). The American Bottoms is situated in a transitional zone between the northern Havana Hopewell that is located north of the Missouri River in the Illinois River valley and adjacent areas, and the southern Crab Orchard Hopewell that extends south of the Missouri River in the Mississippi River valley and east into Indiana along the Ohio River valley (Fitting 1978:fig. 2). The developmental sequence and site distribution within this area is not well known (Fitting 1978:47). The settlement patterns of Middle Woodland sites in western and central Illinois have been extensively studied though, and these locational strategies have been cited as applying to Middle Woodland sites that occur on the American Bottoms (Harn 1971:26; Kelly et al. 1979:25; Benchley 1975:21).

For the Sangamon River valley in central Illinois, Roper (1979: 127-131) describes a settlement system composed of three types of sites: base camps, bottomland sites, and upland sites. The base camps are located at the base of a bluff or the back edge of a terrace. These occur within the edge of the upland forest and are near a permanent water source. Thus, the base camps are situated so as to minimize requisitional effort and maximize diversity of resources. Struever (1968:307) elaborates on this idea by describing the location of Middle Woodland base camps as midpoint between upland and lowland microenvirons. However, Asch et al. (1978:83) present survey data that indicate "that proximity to a large non-stagnant channel is the highest level determinant of site location." They suggest that levees, terrace margins in mid-valley, sloughs with permanent river connections, and entrance points of large secondary creeks all satisfy these locational criteria. [Site W-761-19, located during pedestrian survey of the Centerville Loop

Extension area, probably represents a Middle Woodland base camp. It is situated at the base of the bluffs where Powdermill Creek enters the floodplain.] Ancillary sites were generally located in the two zones peripheral to the medially located base camps: bottomland sites, which were situated to maximize quantities of selected resources, and upland sites that occur primarily as hunting camps.

Village and mortuary sites are concentrated in the largest valleys (Asch et al.1979:83). The regular intervals between these large sites and their obvious relation to mound-earthwork complexes provide a basis for a "central place" settlement pattern, stimulating Struever and Houart (1972) to speculate on their integration into an interregional exchange network.

In the Macoupin Valley, Farnsworth (1973:23) discovered nine Middle Woodland habitation sites, and on the basis of physiographic setting, divided them into four settlement types occurring on the bluff crests and valley floodplain. During his survey of the American Bottoms, Harn (1971) found one Middle Woodland village and 18 campsites of the Havana Tradition. All were restricted to locations bordering Mississippi River meanders. Munson (1971) reports locating five villages and five camps within the bottoms. The villages were all confined to either a talus slope or natural levee near a large source of permanent water. The campsites covered a much wider distribution, occurring in several bottomland zones as well as on the bluffs.

The FAI-270 project report (Kelly et al.1979:25-26) that covers the American Bottoms between the Jefferson Barracks Bridge, west of Columbia, Illinois, and FAI-55, west of Collinsville, Illinois, acknowledges Munson's (1971) and Harn's (1971) observations that there is a concentration of Middle Woodland activity in the northeastern section of the American Bottoms with very few settlements south of that area. The FAI-270 survey identified 18 Middle Woodland sites, some on the basis of isolated lithics. However, it was noted that the project area is virtually devoid of evidence of the elaboration associated with Middle Woodland influence (Kelly et al.1979:25) when compared with the artifactual aspects and the extensive distribution of sites of the Crab Orchard Tradition to the south and the Havana Tradition to the north. Evidence of Middle Woodland groups occurring in proximity to and contemporaneously with Hopewell populations, but not participating in the distinctly elaborate ceremonialism, is not confined to the American Bottoms area. Kinsey (1974), for the Piedmont-Coastal Plain region, and Shane and Murphy (1967), for the central Ohio Valley, argue for an indigenous and uninterrupted cultural continuum existing with minimal participation in the "Hopewell Interaction Sphere".

#### LATE WOODLAND (A.D. 300 - A.D. 1000)

The Middle Woodland culture period has been characterized as an increasingly complex integration of cultural elements including social stratification, elaborate ceremonialism manifest in distinctive artifact styles and occupational complexes, and an improved economic base. These forces have their tentative grounding in an efficient, highly productive subsistence base, possibly supplemented by maize horticulture. It is the ebb of this cultural florescence that marks the commencement of the Late Woodland period.



Benchley (1975:22), however, in addressing this notion of cultural decline signaling the beginning of the Late Woodland, states that just because elaborate artifactual material, large earthworks, and socially structured mortuary complexes are not found in the Late Woodland, "the period should probably not be considered one of decline but rather one of realignment." In fact, as further evidence for continuity between the Middle and the Late Woodland periods, it has been observed that "early Late Woodland subsistence settlement patterns strongly resemble those of Middle Woodland times" (Asch et al. 1979:84). However, the early Late Woodland sites in western Illinois are distinctly different from the pattern that emerges for later Late Woodland phases.

Several scenarios have been described for the Middle-Late Woodland transition. Griffin (1960) suggests that the cultural ebb coincided with a shift in climatic patterns. Farnsworth's (1973) suggestion of a new subsistence orientation based on maize agriculture implies that realignment was the result of greater dietary self-sufficiency that would have dissolved the reliance on an exchange-redistributive network. Regardless of the reasons, it becomes evident that by A.D. 700, major changes in subsistence and settlement were occurring, and that there was a deemphasis of occupation outside the major river valleys (Asch et al. 1979:84-85; Roper 1979:141; Benchley 1975:22; Dragoo 1976:20) with the majority of sites in the American Bottoms situated on the Illinois bluff crests (Benchley 1975:34).

Three factors have been defined as playing a role in the relocation of Late Woodland sites into the Illinois uplands: maize agriculture, population increase, and the bow and arrow (Asch et al. 1979:85). It is postulated that the increasing reliance on maize agriculture fostered the introduction of a new resource (Benchley 1975:22): the rich, tillable loess soils deposited on the Illinois upland borders (Fenneman 1909:64). An increase in population would have put stress on the valley resources so that, with the adoption of the bow and arrow thus increasing hunting efficiency, upland sites could contribute substantial faunal as well as agricultural resources to the subsistence base. The utilization of upland and bottomland sites during the Late Woodland is suggestive of the dichotomous settlement system documented for early historic groups in the Plains and northeast United States (Roper 1979:139-141). This system is composed of two distinct types of sites occupied on a seasonally interchangeable basis. During the summer a base camp or village is established with habitation structures and cultivated fields reoccupied from year to year. After the harvest these sites would be temporarily abandoned for hunting camps in the nearby forests (Bushnell 1919:45, cited in Roper 1979:140). This major territorial reorganization, between the Middle and Late Woodland periods, indicates the gradual restriction of the total catchment area, thus suggesting areally more confined, more autonomous social units (Roper 1979:141).

The majority of Late Woodland sites in the American Bottoms are attributable to the Bluff Culture or Jersey Bluff focus as defined by Titterton (1943). Munson (1971) and Harn (1971) distinguish two distinct phases within the Bluff Culture: Early Bluff (A.D. 300-800) and Late Bluff (A.D. 800-1000).



Munson (1971) and Brandt (1972) observe that Early Bluff site distribution is such that village areas are restricted to bluff tops and the Wood River terrace. The only floodplain components occur along natural levees of Mississippi River meanders. Harn (1971) reports little evidence of Early Bluff in the central and southern portions of the American Bottoms. Sites are situated in a variety of locations from low-lying silty clay ridges to fine sand or silt loam point bars and natural levees. The artifactual assemblage includes burnt limestone, hoe flakes, expanding stem projectile points, and cordmarked, lip impressed ceramics with fine grit tempering and a distinctive reddish paste (Kelly et al. 1979:28).

Late Bluff is further fragmented by Vogel (1975) into two separate phases: Loyd (earlier) and Merrel (later). The distinctions are based on the elaboration of certain traits in the ceramic assemblage. The earlier Loyd phase is defined by a ceramic assemblage composed of cord-marked jars and bowls, and stumpware. The later Merrel phase includes Loyd phase ceramics with the addition of more elaborate types, e.g., a variety of plain and red slipped, limestone tempered and shell tempered bowls and jars. This later phase represents the technological shift from Woodland to Mississippian (Kelly et al. 1979:31). Agriculture, which is only tentatively present in Early Bluff (Fowler 1974), provides a stable base for an increasingly dense population. The settlement system proposed for late Early Bluff, which included primary communities supported by agricultural and nonagricultural camps (Kelly et al. 1979:28), persists into the Late Bluff. However, by the end of the Late Bluff, the settlement system had expanded to include towns serving as administrative centers with surrounding farmsteads and specialized seasonal camps. Bareis (1976:12) describes intrasite patterning at the Knoebel site as a Late Bluff/Mississippian village with a community plan that would suggest a dual social organization or moiety integrated by the central plaza. The similarity of material in Bluff Culture campsite assemblages makes it impossible to differentiate between Early and Late Bluff occupations, and in many cases Bluff and Archaic camps occupy the same site (Munson 1971:13), thus adding to the difficulty in differentiation.

Late Woodland sites, like Archaic sites, are distributed ubiquitously across all physical regions in the St. Louis area with the majority occurring in Illinois uplands. For the American Bottoms, over 90 percent of Late Woodland sites occur on the bottom itself as opposed to terrace ridges or upland forest margins. However, a few sites do occur on talus slopes and high terraces (Benchley 1975:34). Kelly et al. (1979:28) note that for the FAI-270 project, most of the resources identified were Late Woodland, i.e., Early or Late Bluff. Munson (1971) and Harn (1971) have also reported that Late Woodland sites make up the largest component in their surveys of the American Bottoms. Sites W-761-5, W-761-11, W-761-12, W-761-13, W-761-19, Ms 621, and Mo 199, located during the MARGE survey, have been identified as containing a Late Woodland component.

During the Late Woodland, urbanization began to occur in the American Bottoms. Ceremonial centers with satellite communities began to appear. Harn (1971:33) suggests that the Lohman (S139) and Pulcher (S86) sites and their associated camps were controlled or supported by a resident Late Woodland population. The spatial organization of these sites was such that ancillary camps and farmsteads in close proximity "were nearly always

confined to the same terrace and physiographic zone as the main center" (Harn 1971:35). Porter (1974), in an analysis of intersite patterning, defined a settlement model for Late Woodland-Mississippian centers and their satellite communities in the American Bottoms observing that single and multiple mound towns occur at regular intervals along the Mississippi south of the Pulcher site. The distance between multiple mound sites is 16-18 kilometers while single mound sites occur at 3-5 kilometer intervals.

Late Woodland people, based on artifactual and osteological evidence, were an outgrowth of Middle Woodland, but "by A.D. 700-900 these people are feeling the impact of economic developments going on in the Mesoamerican region" (Porter 1977:154). These developments became manifest by A.D. 1000 in the Mississippian culture period. At many sites Late Woodland and Mississippian components coexisted, and it is in certain stylistic and compositional aspects of their pottery that the contemporaneity of these two groups is most evident (Harn 1971:33). For Benchley (1975:23), it is the relationship between this increasingly large, agricultural Late Woodland population and the subsequent or possibly contemporary Mississippian occupation that currently presents some of the most intriguing questions for Midwestern archaeologists."

#### MISSISSIPPIAN (A.D. 900 - A.D. 1400)

"Prehistoric agriculture reached its greatest intensity in the lower and central Mississippi River valley, and it is within this area that the most spectacular expansion of post-Hopewellian culture occurred" (Dragoo 1976:20). By A.D. 800 a new cultural complex, the Mississippian Tradition, developed on the highly productive economic base of the fertile Mississippi River valley. This period envelops the climax of systemic structures that had been developing throughout Woodland times. Social, economical and political systems reached a developmental complexity unparalleled in eastern North America. The greatest number of Mississippian settlements were located in the central Mississippi Valley, but their sphere of influence extended for hundreds of miles in all directions.

The earliest manifestations of the Mississippian Tradition were the Coles and Caddo in the lower Mississippi Valley. By A.D. 900 the Mississippian was firmly entrenched in the central Mississippi River valley with expansions into the Ohio and Missouri River valleys covering "roughly the same area occupied by the earlier central Riverine Archaic complexes" (Dragoo 1976:20). However, Dragoo (1976:22) also notes that Mississippian influence dissipated with distance and that "more distant groups were not particularly influenced or changed."

The mechanisms responsible for dissemination of the Mississippian cultural tradition are poorly understood. Willey (1966:293) recognizes many parallels with Mesoamerican cultures and suggests that influence through diffusion, intermittent contact, even migration serves to explain this possible relationship. Ford (1974:405), however, argues that Mississippian culture is an incipient response to expanding corn agriculture and its accompanying problems. Regardless of the relationship between Mesoamerica and the Mississippian cultural tradition, archaeological and ethnohistorical evidence indicates that large ceremonial centers and towns



were integrated by a complex economic and hierarchical sociopolitical system supported by a hinterland of farmsteads and specialized camps (Dragoo 1976:20).

In the St. Louis area the Mississippian cultural tradition dates from A.D. 900-A.D. 1400, whereas in the lower Mississippi and southeastern United States, societies with Mississippian-like cultures persisted into historic times (Benchley 1975:23). At Cahokia, in the American Bottoms, Mississippian culture reached a level of complexity unsurpassed in aboriginal North America.

The Cahokia site is situated northeast of the present town of East St. Louis along the banks of Cahokia Creek. Areally the site included over 100 mounds spread across a six square mile expanse. Monks Mound, covering over 15 acres, dominates other structures within the site including a central plaza; a wooden palisade; mounds, which supported public buildings, served as site boundary markers, and housed the dead; and a wooden siting device used to provide calendrical alignments (Fowler 1977; Wittry 1977). In terms of its temporal boundaries, several distinct phases have been identified at the Cahokia site.

The earliest prehistoric occupation at the Cahokia site occurred "during the Patrick phase when there were apparently several small farming village communities along the banks of Cahokia Creek" (Fowler and Hall 1978:562). Fowler and Hall (1972) define the Patrick phase in the East St. Louis region as being contemporary with Late White Hall and Early Jersey Bluff, and characterized by cord-marked ceramics with interior rim notching. The Fairmount phase began about A.D. 800-900 and is characterized by a change to ceramics that were more commonly lime-stone tempered with red slipped and polished surfaces. Between A.D. 900 and A.D. 1050 Cahokia had become a major center of trade and population in the area, the construction of Monks Mound began, and external contacts with the Caddo region and northern Wisconsin is evident (Fowler and Hall 1978).

During the Sterling and Moorehead phases (A.D. 1050 to A.D. 1250), Monks Mound was finished and Cahokia reached its maximum extent (Fowler and Hall 1978). It was within the time span of these phases that both the palisade (Anderson 1977) and the "woodhenge" (Wittry 1977) were probably built. The Mitchell site and the East St. Louis site, a linear group of mounds destroyed in the 19th century (Figure 2), were occupied as towns ancillary to the Cahokia site during these phases (Fowler and Hall 1978:564). Also destroyed in the mid-19th century were a group of over 27 mounds situated around a plaza area across the river in St. Louis, as well as a row of mounds along the south bank of Cahokia Creek connecting the East St. Louis and Cahokia sites.

The Sand Prairie phase (A.D. 1250 to A.D. 1500) occupation extended over much of the site area, but was not as elaborate as the previous Sterling and Moorehead phases (Fowler and Hall 1978:566). During this time the Mitchell, and possibly East St. Louis sites, were abandoned with the suggestion that occupational emphasis had shifted back into the tributary valleys. The "establishment of Mississippian manifestations on a regional basis" seems to indicate that Cahokia was no longer serving to integrate the exchange system (Fowler and Hall 1978:567). Following the decline of



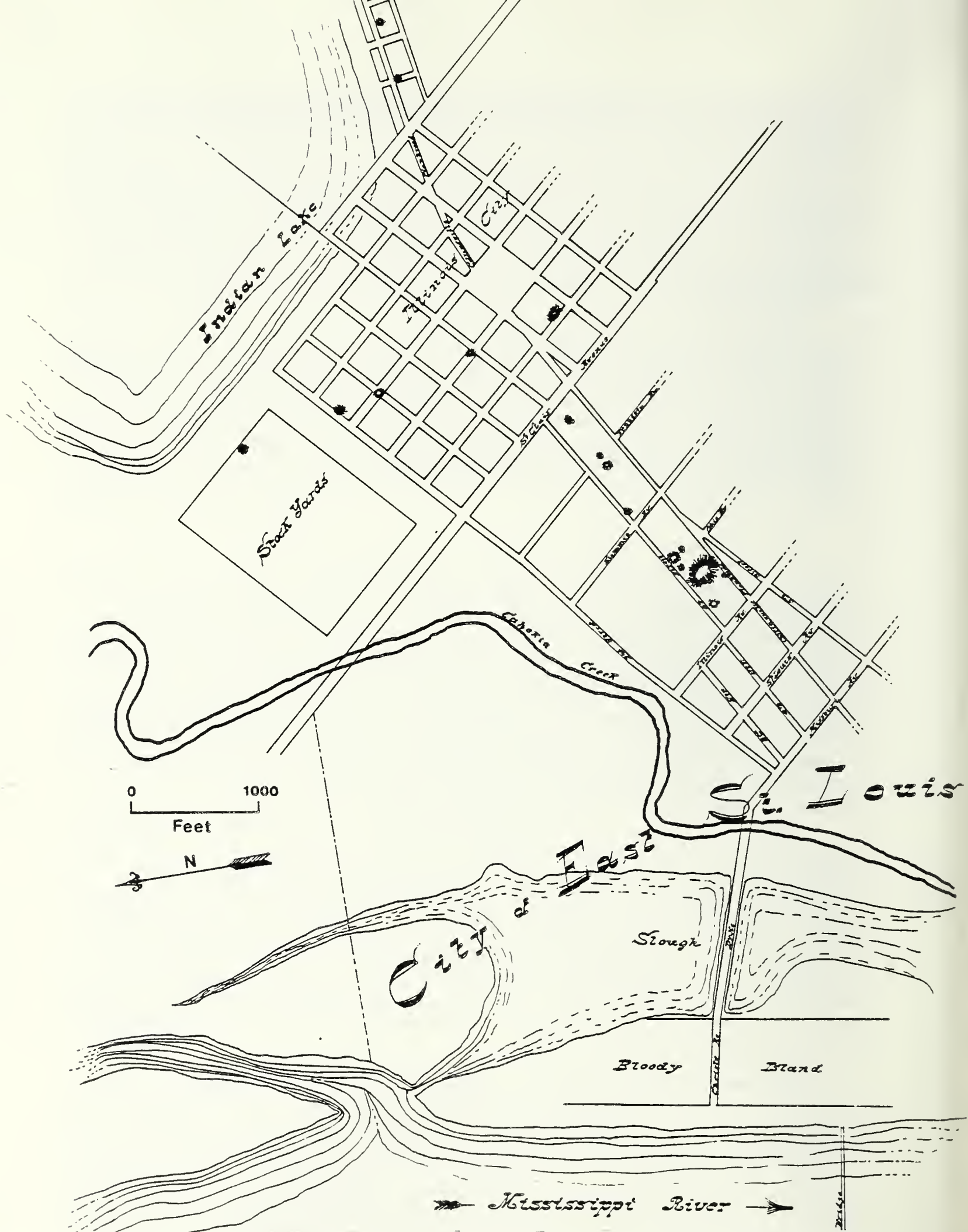


FIGURE 2. East St. Louis Mound Group in the Late 1870s. Courtesy of Mr. Jim Anderson, Cahokia Mounds Park.

Cahokia, several agriculturally-based societies existed on the fringe of the Mississippian domain. For Griffin (1943:258), "the Oneota and Ft. Ancient aspects can be linked together on the basis of their marginal relationship to what is thought of as "pure" Middle Mississippian." Although the Oneota occupations were located north and west of the American Bottoms, some of their material occurs at Cahokia and in the vicinity of Grand Marais Lake (Kelly et al. 1979:35). However, "it is not clear whether the American Bottom Oneota material represents trade items or actual occupation" (Kelly et al. 1979:35).

Dynamic Mississippian culture in the American Bottoms operated through a dichotomous system of hierarchically arranged community structures. At the intercommunity level, a hierarchy of sites was arranged around a permanent central town like Cahokia or Pulcher. Porter (1975:23-24), as previously discussed, has defined a settlement interval occurring regularly between multiple and single mound towns. Around these towns are located satellite villages and farmsteads. Supportive camps existed in varied habitats (Benchley 1975:23). Intracommunity hierarchy reflects a social and political stratification, evident in the organization of mounds containing dead nobles and supporting public structures grouped around a central plaza.

Supportive communities existed in zones that would provide efficient access to plant, animal, and mineral resources. Because the subsistence base was derived from maize agriculture supplemented by hunting and gathering, the population was condensed in the bottoms, which provided a fertile floodplain for agriculture. Kelly et al. (1979:35) consider that "a large portion of the Grand Marais point bar probably was an area of agricultural fields." The proposed MARGE Centerville Loop region lies within this point bar.

After A.D. 1500 little is known of the aboriginals in southern Illinois (Fowler and Hall 1978:568). At French contact the sites of Cahokia, Kincaid, and other temple towns were uninhabited and "the Indian inhabitants were evidently newcomers without any traditions about the decaying prehistoric remains around them" (Benchley 1975:24).

The FAI-270 survey (Kelly et al. 1979) located 30 sites with Late Bluff and/or Mississippian components. Except for a portion of the Lohman site, the mound towns lie outside of the proposed highway alignment. However, because of proximity of the alignment to these larger centers, associated satellite communities are represented in the FAI-270 project area. For Kelly et al. (1979:34) "the FAI-270 sites as a group represent a sample of the Late Woodland-Mississippian settlement pattern for this portion of the American Bottoms."

Munson (1971) and Harn (1971) report finding 15 and 18 Mississippian component sites respectively. Their observations on the characteristics of these sites are remarkably similar. The majority of the sites were located in bottomlands, predominantly along Mississippi River meanders on sandy natural levees. Village sites ranged in size from 1 to 5 acres while farmsteads or campsites were frequently less than one acre. Diagnostic artifacts included shell tempered pottery, occasional Madison points and daub. Lithic artifacts in general were poorly represented, but utilized

chert was identified as Mill Creek, usually occurring as hoe fragments or flakes, and white chert from the Illinois Valley source area. Based on the presence of hoe fragments or flakes and shell tempered ceramic sherds, sites W-761-5, W-761-11, and W-761-13 contain Mississippian components.

Munson and Harn also agree that, relative to the general extent of Mississippian culture in the American Bottoms, their surveys revealed a paucity of Mississippian sites. Munson (1971:16) states that "in light of the extremely large and heavy occupation by Mississippian peoples of the area around Monks mound..., it is noteworthy that the Mississippian occupation is so poorly represented in the survey area." In terms of a possible explanation for this phenomenon, Benchley (1975:24) argues that "Mississippian settlements in the St. Louis region closely parallel the distribution and form of the modern metropolis with its central city, suburbs, and rural areas." Because of the similarity in settlement form, many Mississippian sites, large and small, have been destroyed by urban development. For Benchley (1975:24) "there are no higher priority archaeological resources than the Mississippian sites in and around St. Louis."



## V. HISTORICAL BACKGROUND

### INTRODUCTION

Since the late 19th century, historians and the general public have been entranced by the American West, the last frontier that so captured the attention of the world, and according to many, shaped the character of contemporary America. Novelists, artists, and early historians romanticized the frontier experience into a story of rugged persevering individualism and lawlessness preceding the advance of civilization. Frederick Turner's frontier hypothesis, an explanation of the progression of settlement and rise of modern western cities, was the dominant interpretive theme. Turner pointed to the Mississippi River region as a scene of typical frontier evolution:

"First comes the pioneer who with 'a horse, cow, and one or two breeders of swine...strikes into the woods with his family, and becomes the founder of a new county, or perhaps state. He builds his cabin, gathers around him a few other families of similar tastes and habits, and occupies until the range is somewhat subdued... and he lacks elbow room....[then] he 'breaks for the higher timber,' clears out for the New Purchase,' or migrates to Arkansas or Texas, to work the same process over.' Emigrants of the succeeding class develop farms, build more substantial houses, 'occasionally plant orchards, build mills, school-houses, court-houses, etc., and exhibit the picture and forms of plain, frugal, civilized life.' In the third wave come the 'men of capital and enterprise... The small village rises to a spacious town or city...Broadcloths, silks leghorns, crapes, and all the refinements, luxuries, elegancies, frivolities, and fashions are in vogue" (McDermott 1967:2).

Turner has failed to consider that before there was a rural frontier west, there was an urban frontier. At the same time settlers were making initial forays across the Appalachian Mountains, urban settlement in the American Bottoms, a thousand miles into the wilderness, was already over a half century old. It was the men of capital and enterprise who were the spearheads of settlement in the Mississippi region. Based in towns such as Cincinnati, Louisville, Frankfort, Lexington, and St. Louis, wealthy entrepreneurs exerted control over the commercial activities of regions from centralized economic power bases (McDermott 1967:2,13). Early business ventures provided the impetus for settlement and competed for survival against the schemes of other enterprising visionaries. On one level, the West was a big arena in which urban rivals vied for control of extractive fur, agricultural, mineral and lumber resources, and pushed roads, canals, and railroads into the hinterland to capture and direct the flow of national trade. Company towns emerged almost overnight as support areas for manufacturing and industry, and western business interests were often controlled by eastern capitalists. East St. Louis developed from a ferry landing to a vital link in the transcontinental transportation network and growth as a manufacturing center, yet most of the commercial enterprises and wealth of the city was controlled by St. Louis, Chicago, and northeastern investors. The expansion of settlement and taming of the West must be viewed in light of this theme of the centralized growth of the national and world market and evolution of the urban frontier, if a true picture of 19th century America is ever to emerge.

East St. Louis became an adjunct of St. Louis economic interests very early in its development and has evolved from this early frontier economic mode up to the present. It should come as no surprise that the demography, politics, economics, and physical layout of East St. Louis and the east side in general can be traced directly to 19th century developments. This realization has occurred in East St. Louis and elsewhere as many current problems with the American city are examined and found to be deeply rooted in early American urban traditions. As the problems of the modern city become more and more the central issues of society, the historical perspective of the urban United States takes on new significance and relevancy.

This historical background will examine the development of East St. Louis, and attempt to shed light on the complex interplay of factors involved in this evolution and the resulting effect on the physical layout of the town, business and institutions, and the local population. Research themes that will be developed are the role of East St. Louis as a hub in the transportation network and as a manufacturing center, the internal development of city politics and commercial policy, socio-economic status and ethnicity of the various enclaves of company workers, and the interplay between the natural forces of the Mississippi River and human aspirations. This background begins with the initial colonization of the American Bottoms by the French.

#### FRENCH COLONIZATION

The French, with their stronghold in Quebec, were the first Europeans to realize the strategic importance of the Mississippi River stretching south to the Gulf of Mexico. Having lost the contest for the Atlantic coast to the English and Spanish, France hoped that control of the major north-south artery of the continent would help to further their commercial ventures in fur trading as well as provide a base for their Jesuit missionary efforts among the Indians. France faced only nominal competition for the river valley since the English were still trying to consolidate their gains on the east coast. Spain, though claiming title to the Mississippi Valley under a technicality in Columbus' proclamation, had never explored the river, and at this time were preoccupied in Florida and Mexico (Beard et al. 1960:15-25).

In a ceremony at Sault Ste. Marie on the St. Mary's River, the French officially claimed title to the Illinois area in 1671. Following reconnaissance missions by Jolliet and Marquette in 1673 and LaSalle and Tonti in the 1680s, French settlements were planted along the Mississippi in the late 17th century. In the American Bottoms, settlements such as Kaskaskia, Fort de Chartres, Prairie du Rocher, St. Phillippe, Ste. Genevieve, and Cahokia succeeded as bases for the lucrative fur trade and evangelizing efforts, and began a concentration of settlement and flow of goods south to the Gulf. The founding of New Orleans in 1718 marked the beginning of an economic dependency on this gulf city by the French in the American Bottoms (Howard 1972:23-39).



The town of Cahokia was established in 1699 at a village of the Tamaroa Indians. At first it was more a base of operations for merchant traders, trappers, and missionaries than a full time settlement. It was not until 1731 that the missionaries at Tamaroa purchased land from the Indians for purposes of laying out a town and commonfields. The commonfields, narrow lots extending from the river to the bluffs, included the environs of present day East St. Louis. By 1752 a census revealed the French population of Cahokia to be about 136 people (Belting 1948:13-39). In 1766, the population had grown to about 500 people (Beck 1823:95).

The method of French settlement at Cahokia into compact villages was both traditional and practical. Traditionally, it conformed to the system of villages with commonfields that was transplanted from France. It allowed the immigrants to share in a common culture and religion, and in its practical aspect provided a modicum of safety from other Europeans and Indians by strategically concentrating settlement into a more defensible position than would be possible through dispersed settlement (Howard 1972:41).

The distinct French style of the Cahokia houses illustrates this preservation of cultural traditions even within the context of the alien New World. Governor Ford, who lived in Monroe County in 1805, gives this description:

"The French houses were mostly built of hewn timber set upright in the ground, or upon plates laid upon a wall, the intervals between the upright pieces being filled with stone and mortar. Scarcely any of them were more than one story high with a porch on one or two sides, and sometimes all around, with low roofs extending with slopes of different steepness from the comb in the centre to the lowest part of the porch.

These houses were generally placed in gardens, surrounded by fruit-trees of apples, pears, cherries, and peaches; and in the villages each enclosure for a house and garden occupied a whole block or square, or the greater part of one. Each village had its Catholic Church and priest. The church was the great place of gay resort on Sundays and holidays, and the priest was the advisor and director and companion of all his flock (Buck 1967:95-96).

Cahokia, like many other French villages, was situated on a slough (described as an arm of the river) rather than directly on the banks of the river. However, this may not have been their original intent. Father Charlevoix observed in 1721:

"I was astonished that they had pitched upon so inconvenient a situation, being so far from the river, especially as they had so many better places in their choice; but I was told the Mississippi washed the foot of that village when it was built; that in three years it has lost half a league of its breadth..." (Beck 1823:95).

The harsh environment of the American Bottoms was inhospitable in many ways. The town of Cahokia was described as damp and disagreeable and



frequently inundated in high water. The creek of Cahokia, backed up into lakes and marshes by mill dams in the American Bottoms, was sluggish and pestiferous. The French inhabitants noted that outbreaks of fever, which invariably followed flooding, became more common with the advent of the mill dams (Beck 1823:94), a lesson not heeded by the Americans in the 19th century.

Ever since European nations had laid claim to the New World, the interior between the Appalachian Mountains and the Mississippi River had been an area of contention. French, British, and Spanish claims and interests mingled and crossed, and intrigue for the possession of each other's land never ceased (Wade 1959:1). In 1756 the uneasy peace between the three European powers broke out into the global Seven Years War. In North America, the war had been preceded during the 1750s by small conflicts between the English and the French over control of the Ohio River valley. By 1754 the French and Indian War had erupted in the New World engulfing the English and the French and their Indian allies. After some initial defeats, the British managed to capture the French strongholds at Louisburg, Fort Duquesne, Quebec, and other important territories in the Great Lakes region (McReynolds 1962:18; Roseboom and Weisenburger 1976:26).

Peace was made with the Treaty of Paris in 1763. As a result England acquired control of Canada and all of the territory east of the Mississippi River from France, as well as control of Florida from Spain. Spain received control of former French territory west of the Mississippi and Louisiana. The Spanish control of former French land was seen by most to be only nominal as the French were expelled from the Mississippi Valley only politically (McReynolds 1962:19).

#### BRITISH AND SPANISH CONTROL OF THE MISSISSIPPI VALLEY

In 1763, the same year of the Treaty of Paris, Pierre LaCledé founded the city of St. Louis on the west bank of the Mississippi opposite Cahokia. Though he had been awarded monopoly privileges to trade with the Missouri Indians, the eight year grant was revoked by the Treaty of Paris. However, LaCledé and the trading post prospered all the same. With the fall of Fort de Chartres to the British, St. Louis was made the seat of Spanish government and the military headquarters of upper Louisiana. The population was quickly augmented by an exodus of French from the east bank towns who preferred Spanish rule to British, and by those who feared losing their slaves to new government reform (Howard 1972:44).

Despite the paranoia of the French in St. Louis, many of the Illinois French remained on the east bank of the river and the still profitable fur trade was impetus enough for renewed settlement in the Illinois region. In 1765, Richard McCarty obtained a tract of land consisting of 400 acres for a mill and trading post on Cahokia Creek near present day Illinois and St. Clair Avenues. The settlement was named Post St. Ursule, in honor of his French-Canadian wife (Bond 1969:7). There is very little information on the inhabitants of this early settlement, though elsewhere in the American Bottoms the population was dominated by French, Indians, and Blacks. For instance, in 1771 Kaskaskia was reported to have 500 white and between 400 and 500 black inhabitants; Prairie du Rocher had 100 whites and 80 blacks;

Fort de Chartres had "very few" inhabitants; St. Phillippe only consisted of 2 or 3 families; and at Cahokia there were 300 whites and 80 blacks. Located near these settlements were large numbers of Indians, mainly of the Kaskaskia, Peoria, and Mitchigamia tribes that reportedly had "degenerated into a drunken and debauched tribe, and so indolent, as scarcely to procure a sufficiency of skins and furs to barter for clothing" (Bogges 1908:12).

For the most part these French settlements were little affected by the change to British government in 1763. The British were too involved with Indian problems in the Ohio River valley to be concerned with the Mississippi Valley settlements. The Indian uprising known as Pontiac's Conspiracy was in response to tight British restrictions on trade and an influx of English settlers via Tennessee and Kentucky to the Ohio Valley despite an official ban on settlement west of the Allegheny Mountains (Howard 1972:43-46). After a succession of brilliant victories in capturing 10 British forts, Pontiac's army bogged down, and in 1769 Pontiac was assassinated by a Peoria Indian in Cahokia (Howard 1972:44).

The new lands between the Allegheny Mountains and the Mississippi River were an enticement for land speculation and commercial ventures by wealthy influential men who saw Pontiac's defeat as preliminary to removal of the ban on settlement in the Ohio River valley. A quick review of the get-rich-quick land speculation companies during this period reads like a "who's who" list of famous American leaders. Howard (1972) reports that "George Washington and his brother and the Lee Family of Virginia were partners in a company aspiring to take title to two and a half million acres...of southern Illinois, western Kentucky, and Tennessee. Benjamin Franklin and his son William invested in a Pennsylvania company that sought possession of 1.2 million acres in the west" (Howard 1972:46). Daniel Boone working as a land agent for Judge Richard Henderson schemed to buy from the Cherokee Indians much of present-day Kentucky and Tennessee (Collins 1975:150). These land speculations were premature and most of them never proceeded further than organization on paper (Howard 1972: 46).

In addition to land speculation, the exploitation of the interior revealed a new level of merchandising. As licensed commercial firms pushed into the region from the east, the French monopoly on trade, hitherto unchallenged in the Mississippi Valley, became weakened. In the American Bottoms, the Philadelphia house of Baynton, Wharton, and Morgan established a store at Kaskaskia with branches at Vincennes and Cahokia run by George Morgan (Howard 1972:46-47).

## THE AMERICAN REVOLUTION

On the eve of the Revolutionary War, the British began a series of reforms that would have restored a sense of autonomy to the French inhabitants. In 1774, Parliament passed the Quebec Act that provided for the reinstatement of French civil code and Catholic religion to the interior, with Lieutenant Governors in charge of districts at Detroit, Vincennes, and Kaskaskia. However, the Boston Tea Party and the Declaration of Independence coincided closely with the Quebec Act, and the War of Independence broke out before the new British reforms were tested (Howard 1972:47).



At the outbreak of the Revolutionary War, the western region of British North America was under the control of Henry Hamilton and Indian allies based in Detroit. From this base the British forces raided the settlers in Kentucky, hoping to quickly neutralize the threat west of the Alleghenies and contain the war in the seaboard colonies. By 1776, Hamilton had succeeded in containing the remaining partisan Kentuckians in three stockades and turned his attention to the French settlements in the Mississippi region (Howard 1972:50).

Sensing the impending threat, George Rogers Clark obtained aid from Williamsburg, and in 1778 captured Kaskaskia and Vincennes and rallied French support in the American Bottoms. That same year, the Commonwealth of Virginia created the county of Illinois that extended from the Ohio River to the Mississippi River, in order to more effectively protect and govern the area. Hamilton recaptured Vincennes, but in 1779 Clark recaptured the town and took Hamilton prisoner. However, Indian raids sponsored by the British continued to harry the defenders of Illinois County throughout the war (Howard 1972:50-56).

The new county under Virginia law retained French code and stipulated that religion and customs of the inhabitants should be respected. Clark was commander of the American troops and Colonel John Todd was made county-lieutenant, a sort of civil officer and commander of the military. Captain Richard McCarty of Post St. Ursule was commander of the troops at Cahokia (Bogges 1908:15-19).

However, with the Revolution going badly in the northern colonies and the treasury being depleted to support General Washington's troops, the county of Illinois and its partisan army were left to their own devices. There was great difficulty in supplying and feeding the troops. The fall of 1799 saw American troops and French civilians starving and at odds. With Virginia money worthless and credit overextended, the troops were forced to take cattle, flour, wood, and other necessities from the French without payment. Richard McCarty noted "in short, we are become the hated beasts of a whole people by pressing horses, boats, etc., killing cattle, etc., for which no valuable consideration is given; even many not a certificate which is here looked upon as next to nothing" (Bogges 1908:19-29). In 1781, a letter written to the governor of Virginia, signed by the French inhabitants of Vincennes and representing the views of the American Bottoms French, declared that the French had decided to receive no troops except those sent by the king of France and that Indians friendly to the French would regard the coming of Virginia troops as a hostile act (Bogges 1908:30).

In 1780, a combined British and Indian attack on St. Louis and Cahokia was repulsed by the Americans and inhabitants of St. Louis. This victory was followed up by two French and Indian raids on Detroit in 1780 and a Spanish-led expedition against the Detroit base in 1781. Finally, in 1783, a peace was attained with the second Treaty of Paris. Britain ceded all land east of the Mississippi River to the United States (Howard 1972:56-61).



## THE POST-WAR ANARCHY

Despite the official end to the war under the Treaty of Paris, the American Bottoms was far from being a secure territory of the United States. In 1785, the commandant at St. Louis was readying for an attack from the Royalists at Michilimackinac while the Americans in the Mississippi Valley were still at constant war with the pro-British Indians. The French, who enjoyed good trading relations with the Indians and were generally safe from Indian attacks, plainly wanted the Americans to leave. In fact, they believed that Great Britain had legal right to the area owing to a large British Michilimackinac Company trading post at Cahokia. Because Virginia was still in the process of passing over her western lands to Congress, the Mississippi Bottoms were without even the distant governmental control afforded during the war by representatives of the Virginia Commonwealth. It was the consensus of Illinois Americans that a visible United States government had to be established soon or the Illinois Country would be lost by default (Boggess 1908: 40-49).

Finally, in 1784, Virginia ceded the western lands to the United States under the following conditions:

- "1. The territory should be formed into states of not less than one hundred nor more than one hundred and fifty square miles each;
2. Virginia's expenses in subduing and governing the territory should be reimbursed by the United States;
3. Settlers should have their possessions and titles confirmed;
4. One hundred and fifty thousand acres, or less, should be granted to George Rogers Clark and his soldiers;
5. The Virginia military bounty lands should be located north of the Ohio River, unless there should prove to be enough land for the purpose south of the river;
6. The proceeds from the sale of the lands should be for the United States, severally" (Boggess 1908:45-46).

In 1787, Congress passed the Northwest Ordinance establishing a "territory" of the United States northwest of the Ohio River. The Ordinance provided for a governor, a secretary, and three judges, and allowed for an election of a house of representatives when the population reached "five thousand free male inhabitants of full age". Under the terms of the ordinance, from three to five states could be created as soon as an area attained a population of sixty thousand. Future state boundaries were placed on a line north from Vincennes and from the mouth of the Miami River. The sixth article declared: "There shall be neither slavery nor involuntary servitude in the said territory otherwise than for the punishment of crimes, whereof the party shall have been duly convicted." This prohibition of slavery was a stipulation strongly supported by the Ohio Company, a land company composed of antislavery New Englanders who had been officers in General Washington's army (Howard 1972:62-64).

In 1788, Congress passed an act confirming French title to the land they had occupied with the decision that each family living in the district before 1783 was to be given a bounty of four hundred acres. In doing so the American government was acknowledging the inevitable changes increased settlement would have on the hunting and fur trapping tradition of the French inhabitants. In addition, claimed lands by settlers under French, British, or Virginia grants was to be investigated (Boggess 1908:56-57). This investigation would drag on for years. Since the government held up land sales until the claims were resolved, the area became a huge "squatters camp" as settlement preceded the official opening of the territory (Boggess 1908:58).

The Congressional acts making the Mississippi region a territory of the United States was a landmark event in the history of the Illinois area. Not only did it bring to a close the era of French domination on the east side of the river; it also ushered in a new economic and social ideology, founded in part by the influx of new people and ideas from the east and also by the expanding national and world market.

Prior to the initial American settlement during the Revolutionary War, the French had worked out a design for managing Indian relations and at the same time exploiting the fur resources of the hinterland. This was accomplished by fair trading, and a compact French settlement system that did not threaten Indian land reserves (Howard 1972:47). This system of closing off the Indian land to settlers and allowing only licensed fur traders to enter the vast reservation was adopted by the British after control passed to England in 1763, but was negated by the Revolutionary War and a subsequent influx of American settlers. The major difference between the British, French, and the Americans was that the former two were more interested in exploiting the resources through the Indian population within a fair reciprocal market system, whereas the Americans as a whole were less interested in the mercantile goals of the European countries and more interested in land. Since the mercantile system of Europe meant profit (of a sort) for the Indians while the land hungry schemes of the Americans meant displacement for the aboriginal population, it is easy to see why initial American settlement during the Revolutionary War was not without protest from the French, Spanish, British, and Indians (Boggess 1908:16, 30, 34, 47-50, 54). Though the fur trade would continue to be an important means of commerce for St. Louis in the decades to come, this trade would shift from a local base to the hinterlands of the northwest in the Missouri Valley and the Plains (Oglesby 1967:113). The influx of American settlers in the late 18th and early 19th centuries would begin the decline of the Indians and the fur trade era in Illinois.

#### THE TERRITORIAL PERIOD

The governmental infrastructure provided for by the Northwest Ordinance of 1787 was not actually implemented until the arrival of Governor St. Clair in 1790. Arthur St. Clair, former president of the Continental Congress, had been appointed governor as part of the agreement with the Ohio Land Company, the Scioto Land Company, and Congress. Why did the land companies have so much influence over the Congress? The Scioto Land Company and the Ohio Land Company, made up of many of the most in-



fluent officers in Washington's army, had agreed to buy one and a half million acres of the territory at eight or nine cents an acre. The Continental Congress saw this as an immediate solution to the public debt incurred during the war. In addition, the Ohio Land Company's lobbying force had made a secret deal with a congressional group that wanted five million acres of its own for speculation. That, however, eventually failed (Howard 1972:63).

One of the territorial judges appointed by St. Clair in 1790 was James Piggott. Piggott in many ways epitomized the kind of leader with grand visions shaping the future of the Illinois territory of that day. The biographical information available on this man who was to figure so prominently in East St. Louis history comes from an 1871 lecture by Isaac Piggott, descendant of James Piggott.

Piggott is traced to Connecticut, where he was born and later became a privateer, probably in the French and Indian War. Later, James Piggott moved to what is modern-day Hampshire County, West Virginia, in 1771, but by 1775 he had moved to Bedford County, Pennsylvania, as part of the Ohio Land Company. He saw action in the Revolutionary War under General Washington as a member of the Pennsylvania Associators mustered in as the Eighth Pennsylvania Regiment. After the battle of Germantown in 1777, he was granted a leave due to illness and returned to the frontier to protect his family. Two years later he joined with George Rogers Clark in recruiting settlers for the proposed town of Clarksville near modern-day Wickliffe, Kentucky. Piggott served as trustee for the settlement and captain of the military during the attacks by the Chickasaw Indians. Piggott abandoned the fort in 1782 and brought 17 families to the Illinois Country where they built a new fort near present-day Columbia (Reavis 1876:96-103).

In 1790, Piggott and 45 others petitioned for a "right of preemption," a guarantee that the investment in time and energy the settlers spent in improving the land and holding it despite Indian attacks would be honored when public lands were offered for sale. They wrote "that they had settled since 1783 and had suffered much from the Indians. They could not cultivate their land except under guard. Seventeen families had no more tillable land than four could tend. The land on which they lived was the property of two individuals" (Bogges 1908:71-72).

Many petitions by concerned settlers awaiting the opportunity to acquire official title to the land prompted Congress to pass an act on March 3, 1791. This act allotted four hundred acres "to each head of a family who, in 1783, was resident in the Illinois Country or at Vincennes, and who had since moved from one to the other" or from the territory to the Spanish side of the Mississippi (Bogges 1908:72).

This period of uncertainty in the territory was exploited by the Spanish on the west side of the Mississippi River, who took advantage of the fears of the squatters, immigrants, and French on the east side of the river. The French were told that the United States would free all slaves when Governor St. Clair arrived and offered the French free lands on the west side where slavery was legal. Equally enticing offers of free land, no taxation, and an open market to New Orleans were made to American immi-



grants in Illinois and Kentucky. The combination of inducements to those who would cross the river and swear Spanish allegiance, and the hardships imposed on those who would not, by closing free navigation of the river, succeeded in acquiring for St. Louis a large population at the expense of the Illinois territory (Bogges 1908: 63,71).

This Spanish aggression in the west was a ploy to maneuver the separation of Kentucky from the United States. Spain realized that such a method would win far more converts than would outright takeover. The extreme hardships on commercial ventures in the territories posed by the Spanish closure of the Mississippi River tended to win the allegiance of the ambitious entrepreneurs and wealthy slaveowners, as well as debtors fleeing the French settlements (Bogges 1908:50, 73). It was in this climate of American uncertainty and Spanish subterfuge that James Piggott maneuvered to accomplish a commercial coup on the muddy shore of the Mississippi River between two rival foreign countries.

#### PIGGOTT'S FERRY

In the late 18th century one ferry operated in the bottoms between the town of Cahokia and Ste. Genevieve, which was located south of St. Louis. The swamp opposite St. Louis precluded direct service from St. Louis since there was no suitable road that could stand up to loaded wagons. Piggott, seeing the advantage of direct ferry service from the east bank to St. Louis, set about building an all-weather road in 1792 from Cahokia to a point on Cahokia Creek opposite St. Louis. Piggott and his eldest sons constructed the road with rocks buttressed with logs. They worked in the winter when the threat of Indian attack was less likely. When the creek froze over, they constructed a 150-foot wooden bridge and extended the road to the waterfront. By 1795, the Piggotts had erected two log cabins near the river (Reavis 1876:51-52). All they needed now was a permit and they would be ready for business.

On August 15, 1795, Piggott formally applied to Zenon Trudeau, the commandant of St. Louis, for permission to operate a ferry between Illinois and St. Louis. Piggott noted that he had no desire to infringe on the Cahokia/ Ste. Genevieve ferry, but would like a monopoly from his settlement to St. Louis until he had recovered the personal expenses incurred during construction. Piggott added that he would be able to provide agricultural goods and lumber for Trudeau at the lowest cost, and people crossing the river in their own craft would be welcome to use his landing and road (Reavis 1876:52).

Trudeau granted the request under the condition that Piggott become a citizen of St. Louis under the French version of his name Piquette. Piggott's request was approved by the St. Clair County Court at Cahokia (Reavis 1876:52). The latter approval was easy enough considering the influence Piggott probably carried as an appointed judge. One would assume that approval from St. Clair County was merely a formality since it seems doubtful that Piggott would have invested three years of his time and money in a project if he had not had fairly good assurance that it would be approved. Also, Piggott may have been one of the presiding judges who granted approval since it was quite common for judges to sit in on cases involving their own interests during the territorial period.

The implications of this contract between Piggott and Trudeau, coming at a time of covert Spanish aggression, bear some discussion. Throughout the last two decades of the 18th century Spain had been coercing French inhabitants and American immigrants to leave the east side of the river and become citizens of Spain. The commandant of St. Louis had even gone so far as to write to the French at Kaskaskia, Cahokia, and Vincennes, and offer them free lands west of the Mississippi (Boggess 1908:55). At the same time Spain was hoping to attract American citizens and foment a movement for separation of the west from the United States, they were also negotiating for a commercial treaty with the United States (Boggess 1908:73). In light of these conditions, St. Louis would have had many reasons for granting the ferry monopoly. Not only would it give easy access to the steady flow of settlers from Illinois to the Spanish side of the Mississippi, it would also provide a direct link to the productive American Bottoms, including agricultural products and lumber that St. Louis sorely needed. Most likely, Trudeau and Piggott were looking ahead to the commercial potential of this direct link to the American territory in the event that the trade negotiations between Spain and the United States were successful. Obviously both parties had enough foresight to see the development of the east side of the river as an adjunct in the St. Louis market sphere as an inevitable course of events, no matter what the outcome of the political intrigue.

However, did the St. Louis citizenship that Piggott acquired as a result of this ferry monopoly have any implications reaching farther than a mere concern for good public relations with the French constituents of the Mississippi Valley? In becoming a French citizen of St. Louis, Piggott was also, technically, a citizen of Spain. In their goal of Spanish control of the American northwest territory, Spain was acquiring nominal control of the east side of the river through control of Piggott (a new citizen of Spanish St. Louis). Spain's foothold on the east side of the river through their influence on Piggott was tenuous to be sure, though no one can dispute the fact that success of the new ferry was entirely dependent on the continued benevolence of Spanish St. Louis. Piggott did in fact take his Spanish citizenship seriously and moved his family to the west side. He was possibly managing the ferry business from the station on the St. Louis side of the river at the foot of Market Street (Reavis 1876:51,52). Whatever the designs Spain might have had on Piggott and the east side of the river, they never materialized before Piggott's death in 1799, and American acquisition of Louisiana and the west side of the Mississippi River in 1803 (McReynolds 1962:31, 32).

#### EARLY SETTLEMENT AND ECONOMIC GROWTH

There was no settlement on the east bank opposite St. Louis when Piggott established his ferry operation. The town of Post St. Ursule, founded by Richard McCarty, had dissolved in 1784 after an unusually high flood and a subsequent outbreak of "a malignant malady" (probably typhoid fever). The area remained deserted for the next ten years until Piggott's venture. A map of the St. Louis area made by Nicolas de Finiels in 1797-98 illustrates the Piggott road from Cahokia, the bridge, and the ferry complex. The map depicts Cahokia Creek as "R. a Picket" and two structures labelled "Maison du Nouveau Traverseur," which served as private resident,



ferry office, inn, and tavern (Tyson 1875:18). A loose translation of the French "Maison du Nouveau Traverser" is "House of the New Crossing" or "New Travelers' House" (Smith and Lange 1980:31). In addition, the de Finiels map depicts a series of small sand bars in the vicinity of what would later develop into Bloody Island. The War Office Records Map of 1804 shows a single structure at Piggott's Ferry close to the river as well as the large sandbar in front of St. Louis.

Piggott was awarded 100 acres between Cahokia Creek and the Mississippi River that had served previously as a quasi-reservation for Indians in Illinois during their annual rendezvous with American Bottom fur traders. However, other than a few primitive log buildings, the ferry landing served only a transient population and as a base of operation for the Creoles hired from Cahokia to run the boats.

The first settlement beyond Piggott's ferry complex was commercially oriented. Between 1805 and 1809 Etienne Pinsoneau, a wealthy French Canadian, purchased a tract of land 100 feet by 60 feet across the creek from the Piggott holding and erected a two-story brick tavern. The Pinsoneau tract, called Jacksonville, consisted solely of the brick tavern run by Simon Vanorsdal. In 1815 Pinsoneau sold part of his property to Moses Scott, who erected a store and conducted the first mercantile business in the area. A year later Pinsoneau sold the rest of the town to St. Louis merchants John McNight and Thomas Brady, who also purchased control of Piggott's Ferry (Reavis 1876:51-53). Pinsoneau retained use of the tavern, a blacksmith shop, and a mill on Cahokia Creek. The tavern stood as late as 1868 (East St. Louis Gazette 1903).

In 1817 one of the first steamboats to ply the Mississippi stopped at St. Louis and at the McNight-Brady ferry landing. Seeing the economic potential in the coming steamboat trade and the advantageous position of the east side for supplying fuel and provisions, McNight and Brady established Illinoistown over the old settlement of Jacksonville (Figure 4). McNight and Brady enlarged the lots and widened the streets in anticipation of the important commercial settlement that Illinoistown would become (Reavis 1876:53-55).

At the same time Illinoistown was platted, another town was laid out just north of Piggott's tract. In 1817 Simon Vanorsdal, John Scott, Joseph Clegg, and Daniel Sullivan laid out a town on 100 acres between the Mississippi River and Cahokia, and established an upper ferry. However, by 1819 this town, called Washington, was washed away by the encroaching river (Reavis 1876:55-56), leaving the McNight and Brady ferry with the Illinoistown monopoly.

The original 1818 town plat of Illinoistown (Figure 4) established the street plan that would provide the framework around which East St. Louis would evolve. The town plan depicts part of a bridge over "Kahokia Creek" or "L' Abbe River". The L'Abbe River is probably in reference to the order of French Trappist monks residing on Monks Mound (in the Cahokia mound complex) between 1803 and 1813 (Howard 1972:68). Part of the bridge over this creek is indicated with dashed lines suggesting that part of it had washed away. Two or possibly three buildings are located on the plat east of the creek. No buildings are shown at this time west of the creek.





FIGURE 3A. Site Location Map:  
Engineering and Residential  
Sites.



FIGURE 3B. Site Location Map:  
Industrial and Commercial  
Sites.

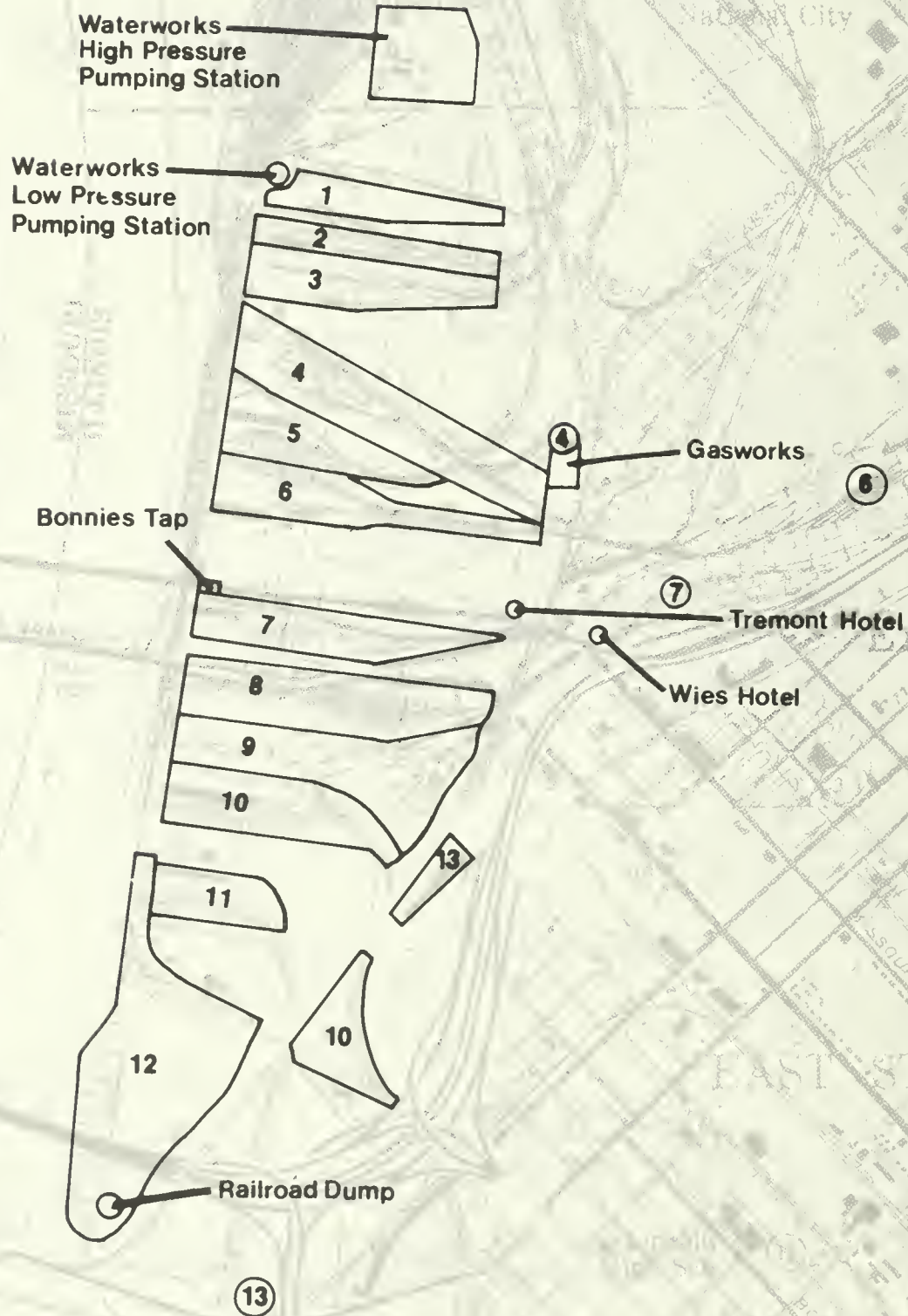






FIGURE 4. The East Side in 1818, Based on the Winkelmeier Map of 1843.



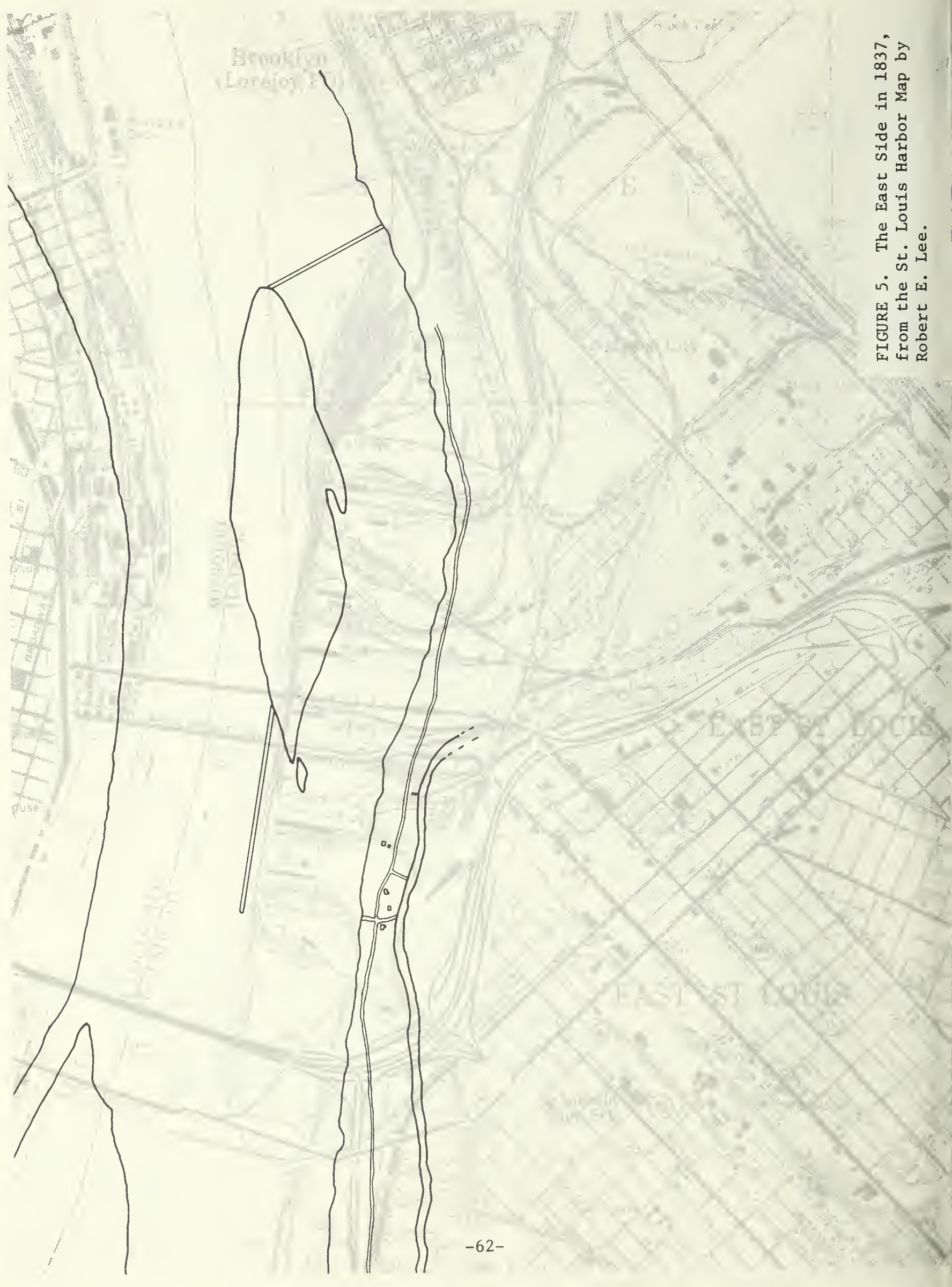


FIGURE 5. The East Side in 1837, from the St. Louis Harbor Map by Robert E. Lee.



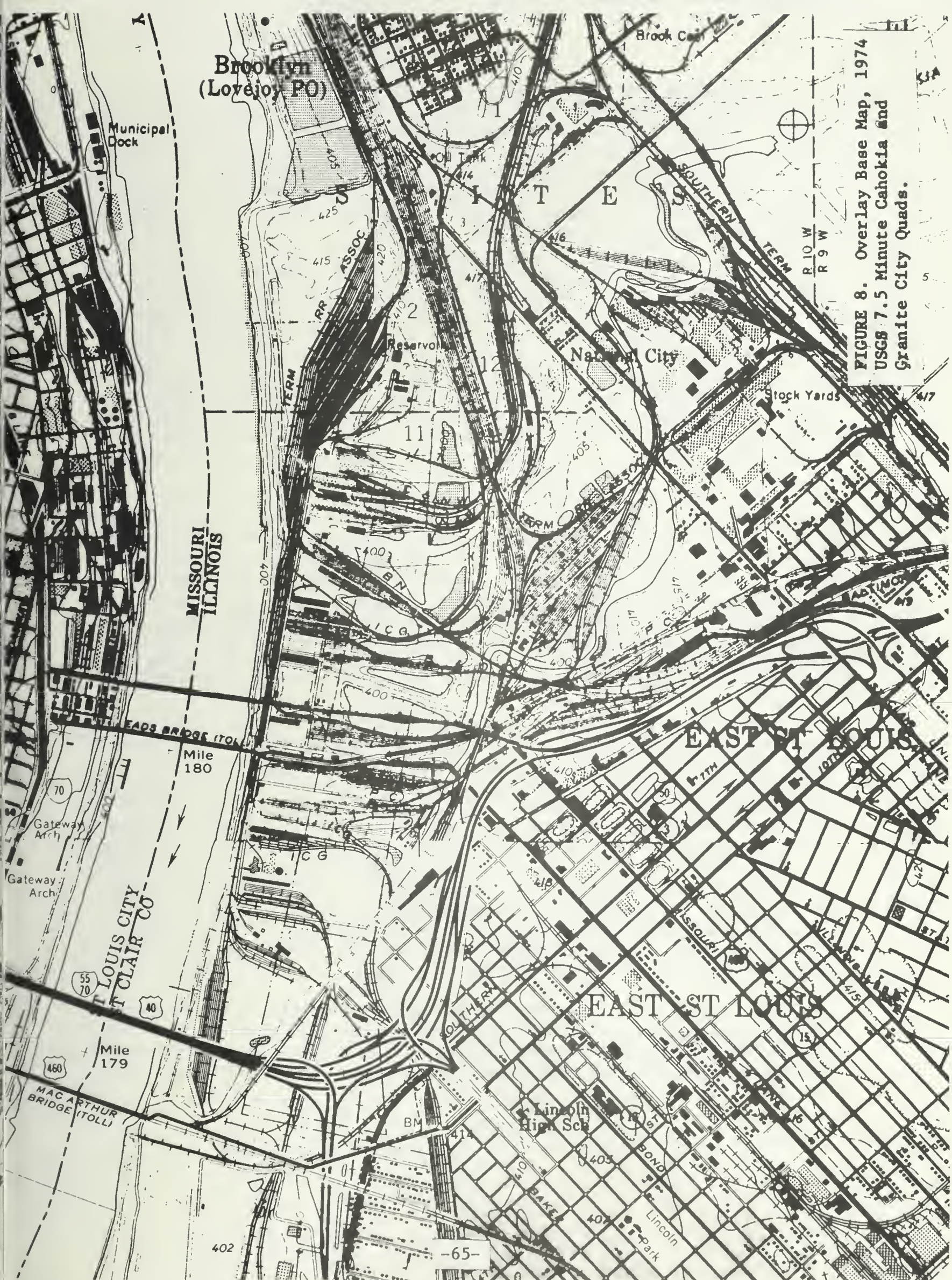






FIGURE 7. The East Side in 1909, from the East Side Levee and Sanitary District Map.







It is noteworthy that at this stage of urban development, the street plan of Illinoistown was aligned with the old French Cahokia commonfields layout. This town plan, trending northwest by southeast, resulted in an oblique alignment in relation to the Mississippi River and directed the land direct approach to the ferry landing in a direction just south of the growing Bloody Island. The southerly growth of Bloody Island from this point on continued to eclipse the ferry landings and push the landing and ferry road south to open water.

The first couple of decades of ferry operation consisted chiefly of supplying St. Louis with foodstuffs and moving immigrants to recently opened lands on the west side of the Mississippi River acquired from Spain in 1803 (Howard 1972:73). In addition, the acquisition of Spanish territory opened the Mississippi River to access without restriction and provided for an expansion in trade and transportation for the Illinois and Missouri settlements (Howard 1972:73). When in 1814 the government opened lands in the public domain of the Northwest Territory for settlement, the population augmented the existing pockets of pre-empted landholders in Illinois and began the establishment of an agricultural base in the region.

It was during this period of immigration that a ferry was put into operation on the east bank opposite north St. Louis. In 1815, John Anthony built a house of cottonwood timber in which to feed and house travelers and rented "skiffs" for those wishing to cross the river (Bateman 1882:521). Like Piggott's Ferry to the south, the Anthony ferry complex remained simple: one building served as office, inn, and tavern. The two ferries seemed to have been designed for two different types of clientele. Whereas Piggott hired Creoles to propel the pirogue across the river at a cost of two shillings (25 cents) to the traveler, Anthony rented his skiffs for a shilling a trip with a passenger doing their own rowing (Bateman 1882:521).

The bulk of the immigrants settling the Northwest Territory and the area west of the Mississippi River were southerners, with roughly half of them coming from the seaboard states, half from the western states (Kentucky, Tennessee, Ohio), and a small percentage from the Northeast and Europe (Buck 1967:99). A large number of the immigrants came by water via the Ohio, Kentucky, Cumberland, and Tennessee Rivers and their tributaries. Those that came across the territory by land most often used the Wilderness Road, which extended from the Cumberland Gap through Kentucky to the Falls of the Ohio, and from there to Vincennes and St. Louis. An alternative branch of the Wilderness Road connected with the Goshen Road, which ran from Shawnee Town through Carlyle to Edwardsville and Alton (Boggess 1908:93). Other routes followed the old French roads up the river through the American Bottoms (Buck 1967:119).

The War of 1812 almost completely checked immigration until peace in 1815 and the opening of new land. The increased settlement at this time spilled into Illinois, boosting its population from 15,000 in 1815 to 40,000 in 1818, the year Illinois became a state (Buck 1967:97).

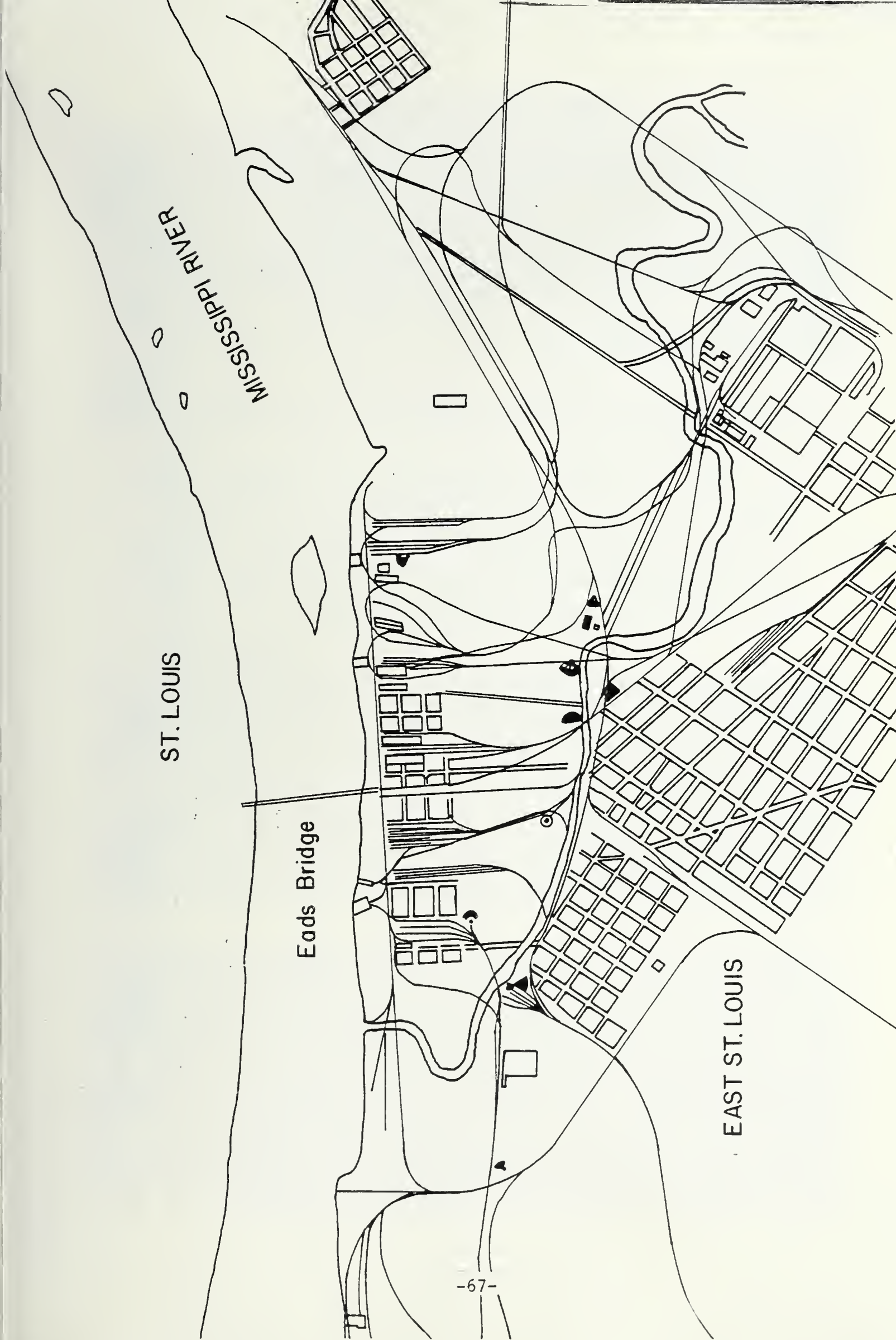


FIGURE 9. The East Side in 1881. From a Detail Chart of the Mississippi River Cairo, IL, to Hannibal, MO. Courtesy of the U.S. Army Corps of Engineers, St. Louis District.



## ECONOMIC GROWTH AFTER STATEHOOD

Immigration and demand for transportation of goods increased dramatically in the early 19th century. As the importance of the ferries grew and the operation became more profitable, the methods of conveyance evolved technologically to handle the growing demand and competition. Piggott used pirogues, canoes made from hollowed-out logs, propelled with oars and poles. Pedestrians rode in the pirogue, and horses, wagons, and other freight were loaded onto platforms placed above two pirogues lashed together (Scharf 1883:1065-1070). Following Piggott's death in 1799, a series of pilots were hired over the next fifteen years to run the ferry for the Piggott survivors with apparently little technological change in the operation during that time.

In 1815, McNight and Brady acquired interest to the ferry and replaced the pirogues with a small keelboat. The keelboat is described by traveler Edwin Draper in 1815:

"The ferry boat on which we crossed was a small keelboat, without upperdeck or cabin, and was propelled by four oars by hand. The wagons, then the only means of land travel, were run by hand on to the boat, across which were placed broad planks transversely, resting on the gunwales of the boat, while the tongue of the wagon projected beyond the side of the boat...The horses, wagon, and saddle, family, slaves, and dogs were stowed in the bottom of the boat between the wagons. (Scharf 1883:1067-1070).

By 1820, the thriving ferry business at Illinoistown necessitated a change from keelboats to team-boat ferries. Team-boats worked by means of a horse treadmill that turned the paddlewheels of the boat (Bond 1969: 15). Anthony's Ferry operation to the north could not keep up with the demand placed on it by the flow of immigrants and Matthew Kerr, a merchant from St. Louis, also established a horse ferry in 1826 (Brink 1882: 521). Brink reports that this horse ferryboat was named Brooklyn, a name which apparently became associated with the ferry landing, for the town of "Brooklyn" appears on Robert E. Lee's harbor map (Figure 5) and Winkelmeier's map of 1843 (Figure 6). However, it is probable that the town of Brooklyn, like many early platted towns, was not much more than an idea in the minds of St. Louis realtors, and Brooklyn probably consisted of only the few buildings of the ferry company.

While the rival McNight-Brady Ferry and the Anthony Ferry were jockeying for position for the St. Louis transfer business, Samuel Wiggins was initiating moves to consolidate the ferry industry into one powerful monopoly. In 1819, Wiggins purchased part interest in the Piggott family ferry, and for two years operated a ferry in competition with McNight and Brady. That same year, Wiggins appeared before the Illinois General Assembly and was granted a charter giving him a monopoly on two miles of riverfront opposite St. Louis and the right to construct a toll turnpike leading to the landing (Bond 1969:11). The ferry charter granted to Samuel Wiggins further stipulated:... "that no ferries other than those then existing should be established within one mile of the ferry established by that Act and that any person who, contrary to the provisions of this act, should run any ferry boat, he, she, or they should forfeit any such boat... to Samuel Wiggins, his heirs and assignees" (Reavis 1876:56).

From that point Wiggins moved to capture the rest of the market in the area by going into partnership with Major Nicholas Jarrot and his daughter Melanie, and buying out the rest of the Piggott Ferry interest of McNight and Brady and other ferries in the American Bottoms (Baldwin pers.comm.) The partnership gave Wiggins a large land base from which to work since Jarrot, in his lifetime, had amassed over 25,000 acres of property, much of it in the Illinoistown area (Baldwin n.d.). The operation of Anthony's Ferry obviously continued, because by 1826 the ferry was taken over by Matthew Kerr. Apparently the little ferry in Brooklyn held on despite the maneuvers of Wiggins to establish a monopoly to St. Louis.

The Wiggins Ferry was well integrated into the economic sphere of St. Louis by 1820. John Paxton, writing for the St. Louis Enquirer in 1821, described the ferry operation across the river:

"Mr. Samuel Wiggins is the proprietor of two elegant and substantial team-ferry boats, that ply regularly and alternately, from the bottom of North H. Street near the Steam boat Warehouse, to the opposite shore. The great public utility of this mode of conveying persons and property across the Mississippi needs no comment, but gives the enterprising owner of them, a high claim to the patronage of his fellow-citizens. The River at the ferry is 1 and an 8th mile in width. Opposite the upper part of the town and above the ferry, is an island about one mile and a half in length, containing upwards of 1000 acres; it belongs to Mr. Samuel Wiggins" (McDermott 1952:71).

However, the prosperity and optimism noted by Paxton as well as other historians and promoters of the day in St. Louis and environs was belied by the overall poor condition of the state of Illinois. In most parts of the state, trade was just beginning to develop. In fact, in some areas deer hides and raccoon skins were still serving as the medium of exchange. The barter system, successful during the early periods, was not sufficient for the kind of capital required to competitively enter the national market dominated by wealthy centers in St. Louis and the East. It was found that agricultural products brought little on the New Orleans market and the little currency available was going into land acquisition and funneled back into the eastern banks. The shortage of money severely hampered the success of merchants and new entrepreneurs in the state.

The early failures of private banks prompted the Illinois legislature to form a state bank in 1821. The bank was authorized to issue three hundred thousand dollars in 2 percent notes and to quickly distribute the money on a first-come, first-served basis with each county getting its share. This system, by which people could borrow money without security was soon abused, and by 1830 liquidation was unavoidable. The legislature was forced to borrow one hundred thousand dollars from Samuel Wiggins to redeem the depreciated currency on a pledge that it would be redeemed from taxes on land owned by nonresidents. For years afterward, the Wiggins loan was a campaign issue by taxpayers who believed the state had sold out to Wiggins; and as a result, many legislators who supported the Wiggins loan lost their seats at election day (Howard 1972:121-125, 202).



The disastrous consequences of the first state bank were forgotten in the wave of Jacksonian Democracy and condemnation of the national bank system. By 1832, state bank systems again came into favor with the belief that the state bank could pay for railroads and other improvements (Howard 1972:203).

The state bank was re-created in 1834 with capital of \$1,500,000, of which \$100,000 was to be subscribed by the state and the remainder by individuals with preference to residents and small subscribers. In spite of the caution to prevent abuse of the state bank by non-residents and corporations, representatives of special interest capitalist blocks in the east acquired control by using the names of Illinois citizens on subscription blanks for small amounts. Comprising the contingency seeking to gain control was Benjamin Godfrey and W.S. Gilman of Godfrey, Gilman, and Company; John Tillson; Thomas Mather; T.W. Smith; and again Samuel Wiggins. Wiggins acquired, along with 15 other representatives, a majority of the bank shares, as well as additional shares later as payment for the 1821 loan (Pease 1922:304,305).

By 1835, the state bank credit was extended and stock was increased in order to finance internal improvements within the state. However, the over-extension caught up with the system, and in 1837 the banks were hit hard by the panic of 1837, forcing them to suspend payment on stock owed. Legislative investigations revealed that corporate groups had misused bank stock in ambitious schemes to build commercial enterprises in the Midwest by northeastern business firms. In particular, it was discovered that New England investors had used their shares to fund a venture to turn the lead trade from St. Louis to Alton, Illinois. In addition, Samuel Wiggins had unethically used his bank stock as collateral for a loan with which to make payment of interest on his bank stock. The disasters of the state banks turned popular opinion against state banking and the use of nonmetal specie (Pease 1922:306-315).

The difficulty Wiggins had in meeting his payments of stock possibly explains why he sold the ferry company in 1832 to a syndicate headed by his brother William and by Samuel Christy (Bond 1969:12). Documentation so far is silent on the exact reasons why Samuel Wiggins would sell a seemingly profitable business. The references to Wiggins' over-extended activities in the state bank system suggest that he had overstepped the bounds of ethical and prudent business practice in his abuse of bank stock and had undermined the confidence of lenders, investors, and important political contacts through his wild speculation. The double-edged nature of Wiggins' close political ties to Whig leaders in the legislature was of no help in the tide of moderate democratic reform, divorcing the state from the banking system and subordinating the banks to the will of the majority. Resolutions were passed in the wake of the bank scandal against the "danger of monied oligarchies," and Governor Carlin declared that "channels of business ought not to be filled up and controlled by a circulating medium susceptible to expansion and contraction at the pleasure of the few (Pease 1922:308, 309).

The political and economic shifts following the panic of 1837 signaled a growing popular concern for the evolving corporate system that was emerging in the early 19th century. This system was thought to be under-



mining free enterprise and serving special interests at the expense of the public welfare. However, the practices of entrepreneurs like Wiggins were the model of many such successful business operations in the early 19th century. That is, success often hinged on the ability of an entrepreneur or partnership to acquire enough capital to be first in establishing a venture, to beat out competition, to hang on during economically unstable times, and to adapt to changing demand and technology. This contest for economic survival was by no means unusual for a society with a strong tradition of "privatism," the essence of free enterprise, where the focus was on the individual and the individual's search for wealth (Warner 1970:32).

In the emerging years of the old Northwest Territory, privatism was probably the most important element in the growth of the economy and the city. This meant that the city depended for its wages, employment, and overall prosperity upon the successes and failures of individual enterprises, not community action. The local politics and social and economic environment were shaped by the focus of private economic activities with the mode being that "if each man would look to his own prosperity, the entire town would prosper" (Warner 1970:33).

Interwoven with this tradition of privatism was the belief that conditions in early American cities offered the promise of opportunity for all levels of the society. This belief in American egalitarianism is perhaps best expressed by Alexis de Toqueville in his Democracy in America: "...in a democracy like that of the United States, fortunes are scanty (because) the equality of conditions (that) give some resources to all the members of the community...also prevent any of them from having resources of great extent" (Chudacoff 1981:50-51). Recent studies have prompted many historians to dismiss this as the "egalitarian myth". The American system of free enterprise gave the advantage to the wealthy. The old adage that one needs money to make money might be a more appropriate characterization of 19th century enterprise. For example, in Boston four percent of the population owned 59 percent of the wealth in 1833 and 64 percent by 1848; in New York 4 percent controlled 49 percent of the wealth in 1828 and 6 percent in 1845 with similar proportions of wealth to population in Philadelphia, Brooklyn, Baltimore, St. Louis, and New Orleans (Chudacoff 1981:51).

In Illinoistown the physical form of the city and its economic base was predominately the outcome of a market for profit-seeking builders, land speculations, and large investors based in St. Louis and other established cities. Figures like Piggott, McNight, Brady, Jarrot, Wiggins, and Reynolds were men with both a vision and the capital and contacts to back their enterprises. They did not spring upward out of the humble class of frontiersmen immigrating across the continent; they were businessmen at the forefront of a growing market. The state bank experiment to provide access to capital evenly among those without was a failure. It was found that the prevailing trend of business in the Illinois territory had gone far beyond what could be corrected by an egalitarian bank system, and in fact had succeeded in increasing the gulf between the elite class of entrepreneurs and the lower economic levels of society. Along with this was the growth of outside influence in Illinois politics and economics by New England and St. Louis speculators who used the state as an arena for business ventures that provided little for the local welfare (Pease 1922: 308-310).

In the wave of reform, the Illinois legislature turned to the Wiggins Ferry Company and declared that the monopoly on transportation between St. Louis and Illinois was detrimental to healthy trade and commerce. The legislature pointed out that the ferry could not handle properly the growing demand, thus causing delays of several hours in the fall season, and that the monopoly in the hands of St. Louis stockholders was causing great injury to the residents of Illinois. An act passed in 1839 required the St. Clair County Commissioners to locate another ferry in the same area to be leased for five years. The Wiggins Ferry Company took the case to the United State Supreme Court, but in vain (Baldwin pers.comm.). The second ferry in Illinoistown was located at the old site of Washington, where years before the upper ferry had succumbed to the Mississippi River.

#### GROWTH OF SETTLEMENT AFTER STATEHOOD

The summary of economic growth presented above is prerequisite to an understanding of the settlement pattern that developed in the American Bottoms. Early settlement in the Illinois riverbottom in the early 1800s came at a time when St. Louis was in the midst of a vigorous struggle with other western cities for control of markets and commercial transportation lines (Wade 1959:163, 177). Because of the ongoing regional contest between urban powers throughout the 19th century, economic growth and settlement of the Illinois suburbs of St. Louis must be considered in light of the position they held in respect to both the development of the larger market picture and local battles going on for domination of the entrepot position to St. Louis. In addition the struggle by the Illinois towns for capture of a piece of the action from St. Louis and assertion of a measure of commercial independence was an important factor in the economic picture. Because Illinoistown was quickly claimed by St. Louis business interests in 1815, whereas Brooklyn and Venice were pulled into the Alton economic sphere, the battle between the two commercial interests of St. Louis and Alton extended to their respective ferry towns. With this framework as a guide, the discussion of the growth of settlement in the American Bottoms can proceed to a closer view of the commercial and social growth of the east bank of the Mississippi River after Illinois statehood.

When the anarchy of the territorial period finally stabilized around 1818 with Illinois statehood, the preceding economic and political flux had resulted in a drain in population and power from the old French settlement of Cahokia to St. Louis and the Illinois towns on the opposite side of the river. This shift in concentration of population and resulting movement of the lines of transportation as a result of Piggott's Ferry left Cahokia and Ste. Genevieve too far south to be a factor in the ensuing growth of the St. Louis entrepots. Since Cahokia had become landlocked during one of the many shifts of the Mississippi River, the little town had not even a chance to develop as a riverport for the growing export trade of furs, timber, and lead.

The impact of this course of events on the old French towns bypassed by the expanding commercial network was devastating. By 1819, a visitor to the American Bottoms described the residents of Cahokia as "a wretched set of beings half French, half Indian, retaining part of the manners of both". The houses (in Prairie du Rocher) were compared unfavorably with the



piggpens in Pennsylvania, being of "the most antique and mean appearance, built of the bark of trees and puncheons, slabs etc. often without doors. The windows are without sashes but small pieces of broke glasses of all shapes pasted ingeniously together with paper serve to admit the light upon a motley family, between white, red, and black. Many of those wretched hovels are ready to tumble down on the heads of starving Indians, French, and negroes, all mixed together. Negro-French is the common language of this town" (Buck 1967:93, 94). The narrator, Richard Manson, added: "when I have expressed an opinion which appears not to have been liberal, it is intended to apply to the lower class, of whom there is a large majority... although some of the French are rich, liberal, and gentlemanly men, yet this memorandum is strictly correct when applied to the general mass" (Buck 1967: 94). Despite the extreme caution which should be exercised in accepting any historic observation as more than a biased opinion, Manson's narrative is, to a certain extent, an accurate perception of the drain from the French towns of the "gentry class", the wealthy visionaries, slave holders, and entrepreneurs drawn to St. Louis, leaving behind the low status "habitants," the poor fur traders, the ignorant, and the destitute in Illinois to occupy the ghettos in the old French towns (Buck 1967: 93).

The east side of the river was an economically depressed area when Piggott established the ferry in 1795. By the turn of the 19th century, Piggott's ferry landing was still little more than an outpost in the wilderness. In addition to Piggott's multi-purpose buildings described earlier, it is conceivable that the Creoles Piggott hired to propel the pirogues were quartered somewhere nearby, though archival sources are mute on that question and it is possible that the hired help resided in nearby Cahokia. The map of St. Louis in 1804 from the War Office Records depicts only one building located near the edge of the river. In general, it appears that the ferry enterprise was the sole occupant of the area up until Piggott's death.

When the fortunes of the east bank of the Mississippi River shifted north to the location opposite St. Louis, it was the wealthy gentry, such as Etienne Pinsoneau and Nicholas Jarrot, with large landholdings and commercial aspirations, who joined with the newly-arrived easterners like Samuel Wiggins and John Reynolds to establish an economic base. However, these ventures were carried out by non-resident speculators with diverse investments. In addition to the ferry holdings, Jarrot had 25,000 acres (Howard 1972:84), and Pinsoneau's holdings included large parcels in Illinoistown (Tyson 1875:19-20) and Venice (Brink 1882:522). Jarrot owned a flour mill and a large mansion in Cahokia (Bogges 1908:167), and Pinsoneau owned a blacksmith shop, tavern, and mill in Illinoistown (Tyson 1875: 19-20; East St. Louis Gazette 1903; Anonymous n.d.). McNight and Brady were St. Louis woolen merchants, Samuel Wiggins was based in Cincinnati, and Matthew Kerr was a merchant in St. Louis. The absentee ownership of Illinois' most lucrative ferry and milling business was of concern to many in Illinois; however, St. Louis was to enjoy the fruits of these commercial ventures until economic opportunities other than the ferry business were developed and profit was retained for local investment.

True to the historical domination of transportation in the American Bottoms, the first non-ferry or milling business centered around providing services to immigrants and travelers. Both Piggott's Ferry in 1818 and



Anthony's Ferry in the 1820s contained a building serving as an inn and tavern. In addition the Piggott and Brooklyn Ferries acquired blacksmith shops (Tyson 1875:19-20; Bateman 1882:521) a few years into the ferry operation. Presumably, the blacksmith shop maintained the ferry equipment (which often included horses) as well as functioning as a service for the needs of immigrants.

The first description of Illinoistown is in 1821 by ethnologist Henry Schoolcraft. Schoolcraft's only comment as he passed through Illinoistown was that the town "was separated into two parts by the stagnant and pestiferous channel of Cahokia Creek" (Bond 1969:14). This would indicate settlement both near the ferry landing and east of the creek within the limits of the town plan platted in 1818, though not necessarily in harmony with the street plan. Schoolcraft noted the lively intercourse between St. Louis and Illinoistown (Bond 1969:15), which can be accounted for by the fact that Illinois was the principal supplier of agricultural products and coal for St. Louis by this time (McDermott 1952:71).

Beck reports that in 1823, Illinoistown was located about 400 yards from the Mississippi River on the east side of Cahokia Creek, and that it consisted of 20 or 30 houses and 100 inhabitants. Beck noted that though the town was surrounded by fertile country, it had few other commercial advantages and was in an unhealthy situation (1823:160).

Illinoistown was described in 1837 by the Reverend John Mason Peck as a small village of about a dozen families. The town was said to contain a hotel, livery stable, store and post office. Wiggins Ferry was the official name of the post office and Samuel Wiggins was the postmaster (Bond 1969:16).

By 1841 Illinoistown had grown into a "lively commercial river town" with "125 houses, an iron store, one distillery, two stores of general merchandise, five groceries, two town bakeries, one saddlery, one shoemaker, two blacksmith shops, one coopers shop, one tailory, and two taverns or hotels besides a variety of other subsisting businesses. Also a recently-established printing office issued a weekly newspaper, the American Bottom Reporter (Bond 1969:16).

The phenomenal growth of both residential and commercial settlement in Illinoistown during this four year period, is, if we can accept the accounts as accurate, an indication of the growing importance of the east side of the river and economic maturation. The apparent decline between 1823 to 1837 was probably a result of the devastating flood of 1826 and loss of population to more suitable locations. In addition, the town was probably very much directly influenced by economic fluctuations on a larger scale. The biggest changes in domestic trade were brought about by the steamboat in the 1820s and canals in the 30s and 40s. The effects of these developments in transportation were to decrease the costs of products coming into the west from the east while increasing the marketability of commercial goods in the west by providing cheaper transportation to the east (Taylor 1966:160-161). The drastic change in the fortunes of Illinoistown seems to be a reflection of the change from primarily a supplier to St. Louis to a lively commercial town in its own right.

Wild's description in 1841 is accompanied by illustrations that indicate much about the nature of the internal arrangement of Illinoistown at this stage. Plate 1 depicts Illinoistown looking south at the new bridge. The illustration includes a grocery with outbuildings south of the road and a large two-story building that was probably a residence or inn. Across the creek are seen six buildings, one of which appears to be a livery. The functions of the other buildings are difficult to determine from the illustration; however, it does appear that the buildings are aligned parallel to the river (Wild and Thomas 1948).

A second Wild illustration, "St. Louis and Vicinity," portrays Illinoistown as seen from the roof of the Planter's Hotel looking east. The view shows the same area depicted in Plate 1, though there is not enough resolution to identify specific buildings. However, again it does appear that the buildings are situated parallel to the Mississippi River.

A detailed survey conducted in 1843 by Louis Winkelmeier provided the overlay map for Figures 4 and 6. The map shows St. Louis, Illinoistown, and Bloody Island in 1818 and 1843. The information from the map has been separated into two overlays to facilitate comparison with the 1837 overlay (Figure 5). The Winkelmeier map (Figure 10) shows the town plan of Illinoistown and the old ferry road across Cahokia Creek branching off to the various landings. Apparently one of the cartographers erred in the placement of Illinoistown as it is about 25 degrees out of alignment with the original Illinoistown Plat of 1818. To the south is depicted the new ferry road with several buildings labeled, including a dwelling and a grocery on the north side of the road and a stable, grocery, store, boarding house, and blacksmith shop on the south side. Oddly enough, the map indicates a ferry alignment almost perpendicular to the river, in contrast to Wild's illustrations showing buildings seemingly strung out along the bank.

The absence of structures in Illinoistown is not significant since Winkelmeier fails to show any in St. Louis either. However, it would seem that out of the more than 125 structures mentioned by Wild, there are a very small portion of them shown west of Cahokia Creek, far less than is indicated by Wild (Plate 1). It is difficult to judge Winkelmeier's accuracy in location and choice of structures mapped without an analysis of the map within the historical context.

The 1843 map (Figure 10) credited to Winkelmeier and Captain Thomas Jefferson Cram (1844), a topographical engineer for the Army Corps of Engineers, was possibly the work of both men. Captain Cram's interest in Winkelmeier's map was apparently due to his need for an accurate map to depict the topographical features needed for his report on the St. Louis harbor improvement project. When the topographic information is subtracted, with the exception of the town plats, the remainder of the information deals predominantly with the Wiggins Ferry property. Obviously, Captain Cram may have had very good reason to include ferry landings as they might provide information on rate of channel erosion and sedimentation. In light of the \$190,000 dollar budget for improvements recommended by Cram following on the heels of a denial of funds by the federal government a few years earlier, perhaps Cram also wanted to illustrate the urgency of the situation in terms of impact on St. Louis' crucial ferry



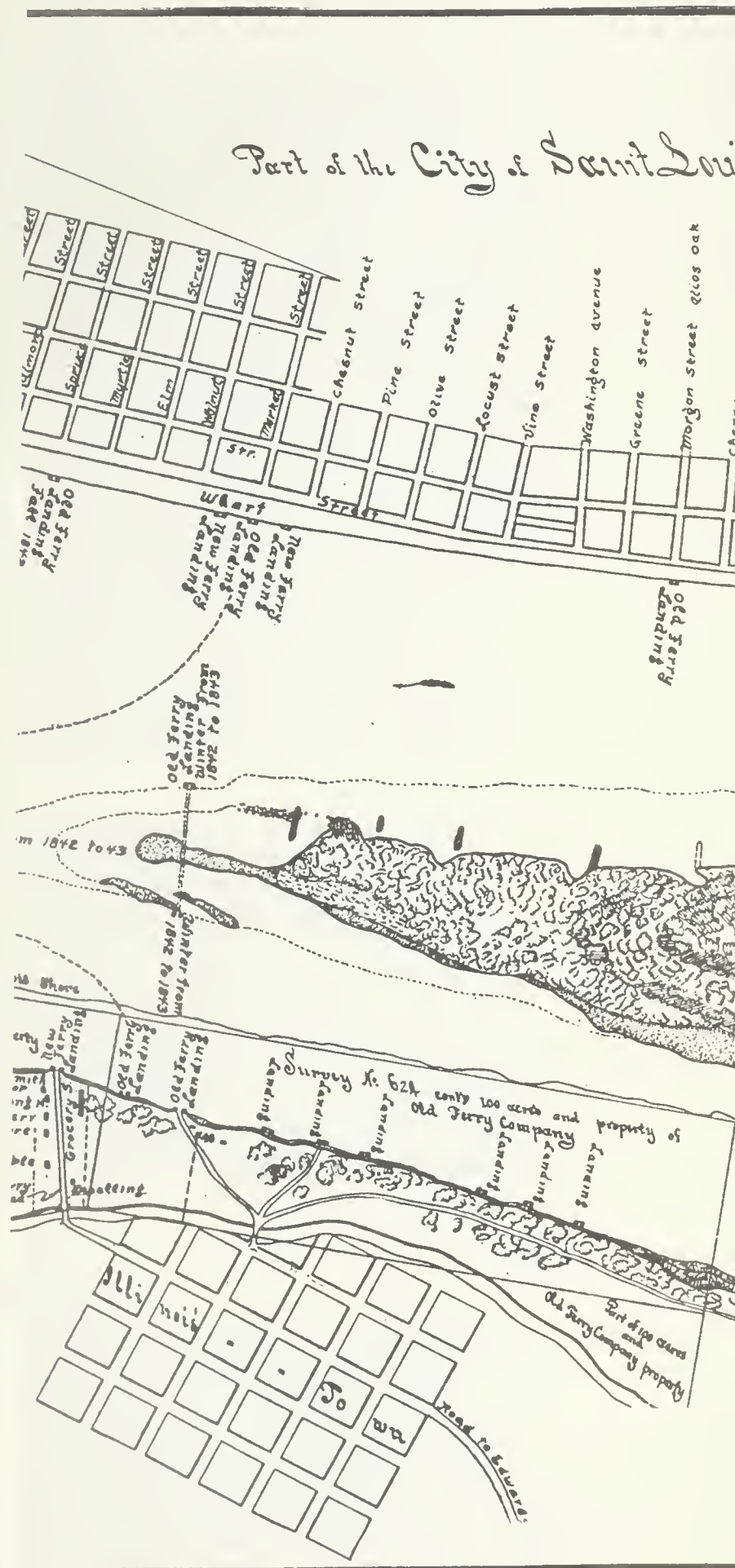


PLATE 1. Illinoistown in 1841, as Illustrated by John Casper Wild. Source: J.C. Wild and Lewis F. Thomas, The Valley of the Mississippi, Illustrated.





FIGURE 10. The 1843 Survey of Bloody Island, from Louis Winkelmeier.



# Part of the City of Saint Louis, State of Missouri

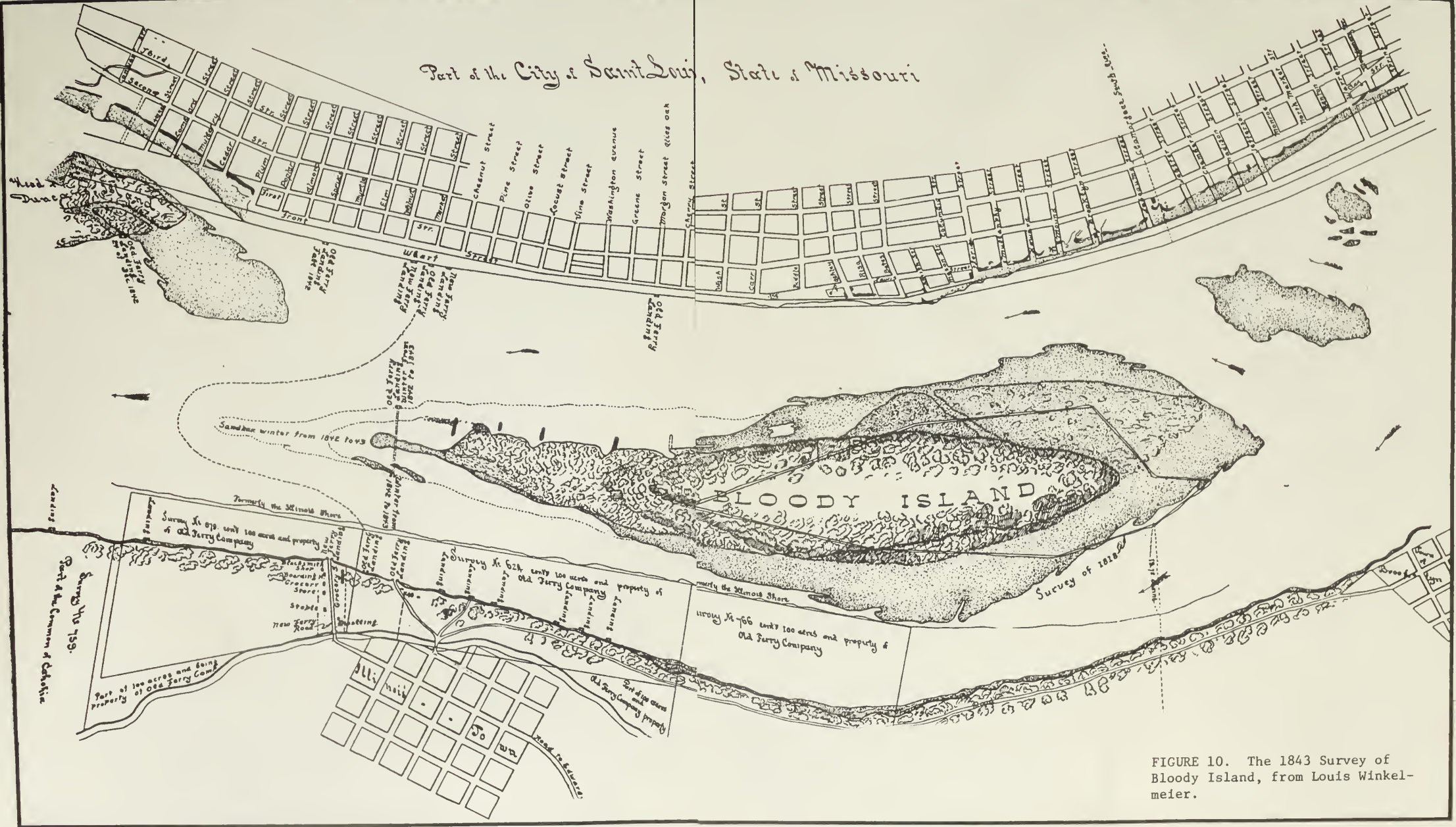


FIGURE 10. The 1843 Survey of Bloody Island, from Louis Winkelmeier.



transportation link. However, this still leaves the question open as to the original purpose of Winkelmeier's map, and the seemingly redundant Wiggins property information. One explanation is offered that seems to explain the incongruous aspects of the map. If Winkelmeier's map was originally intended to show Wiggin's ferry holdings, then the cluster of buildings along the new ferry road are possibly also Wiggin's Company property. The dashed line enclosing the structures (Figure 10) would then be a boundary of some sort delineating the area occupied by the Wiggin's buildings. It seems logical that a new bridge and ferry road to the new landing on Wiggin's property would have been constructed by Wiggins and that the buildings along this road would also belong to the company. It is probable that the other structures mentioned by Wild in 1843 were located around the vicinity of the Wiggins Ferry complex and east of Cahokia Creek. This explanation is given to provide a base for further inquiry into the Winkelmeier/Cram map and the Wiggin's Ferry Company. Historians writing previous to this study (Bond 1969; Smith and Lange 1980) have not recognized the significance of this map in researching the relationship between St. Louis and the ferry company, and the Wiggin's Company involvement in the St. Louis harbor improvements. Future researchers should also be wary of a copy of the Winkelmeier/Cram map reproduced in the East St. Louis Centennial Program 1861-1961, which has had street names drawn in the Illinoistown plan to reflect the modern street alignment. This practice has caused some misinterpretation of historic street names (c.f. Bond 1969:18).

Despite the impression that the Winkelmeier/Cram map might give, Illinoistown was a bustling, thriving, commercial town by this date. Wild noted that two-thirds of all cattle, horticultural, and agricultural products consumed by St. Louis came from the American Bottoms, for which Illinoistown was the thoroughfare. Echoing the sentiments of the Illinois state legislature two years earlier, Wild noted: "The quantity of wagons, movers, horses, and cattle which pass through this place is very great. The competition which will now probably take place between the old and new ferries will very materially conduce to the improvement of the bottom and Illinoistown... It is now in a greater state of activity than it has been years before, and time will do the rest...a more interesting spot for the enterprising and active capitalist does not probably exist in the neighborhood of St. Louis" (Bond 1969:19).

#### THE STEAMBOAT ERA

By the second decade of the 19th century, the continental expanse of the United States had dictated that the waterways would provide the chief means of transportation of goods from the west to the markets at New Orleans and the Northeast. The bulk of the products were floated downstream on rafts and flatboats. However, because these vessels were too clumsy to navigate upriver, they were usually broken up for lumber at the end of the haul. From New Orleans, these upriver products were sent either to Europe and the West Indies, or they were shipped around the coast to the Atlantic ports, namely New York, Boston and Philadelphia. The final act of this transportation circle was completed by the routes across the Appalachian Mountains from Philadelphia and Boston. By this overland conveyance, the West received the manufactured goods (textiles, hardware, ceramics,



books, tea, etc.) that at this time were not being produced locally and could not be economically shipped northward from New Orleans (Taylor 1966:159).

Steam power had already been proven to be a potentially feasible means of water transportation at the end of the 18th century. However, it was not until the technology had sufficiently developed in the first decade of the 19th century that steamboats were commercially viable on the Mississippi River. By 1817, steamboats had demonstrated their feasibility in successful trips from Pittsburgh to New Orleans and by 1820, the number of steamboats in the West had risen to 69. After a slight setback during the overall economic decline in the early 1820s steamboat growth became phenomenal, increasing a hundredfold between 1820 and 1860 (Taylor 1966: 63-64).

The advent of the steamboat meant for St. Louis an expansion of the growing fur and lead industries as well as establishment of an economical means to exploit the timber and grain resources in the Mississippi Valley hinterland (Wade 1959:202). For the Wiggin's Company and Illinoistown, as well as Kerr's territory at Brooklyn, the steamboat meant an enormous increase in the demand for ferry services to transport goods and to fuel and supply steamboats. However, more than anything the steamboats provided an inexpensive means to move goods, thus making possible commercial venture at a lower capital investment (Taylor 1966:56-63).

The advantages of the steamboat over the traditional flatboat were its speed and upstream navigational ability. Yet, paradoxically, the steamboat served to stimulate operation of the flatboat in the mid-19th century. "Rivermen no longer had to walk back across country or laboriously pole their keelboats upriver...Farmers on small streams inaccessible to steamboats...found it advantageous to (flatboat) all the way to New Orleans" (Taylor 1966:64, 65). In this way, the steamboat and the flatboat complemented each other since the bulk of the downriver freight exceeded the finer goods brought upriver for consumption (Taylor 1966:65).

One of the most notable aspects of the steamboat industry was the relatively low capital needed to go into the business. Since the waterways provided free highways and the cost of construction of a medium-size boat was within the reach of groups of people with only moderate wealth, half the steamboats on the Mississippi were owned by from one to four men, and funded with local capital. This meant that steamboat companies were chartered by various parties including mercantile interests, manufacturers, farmers, as well as those corporations engaged in canal and turnpike construction. In addition, steamboat service-oriented business grew up to insure, build, fuel, repair, and supply the steamboat industry all along the major navigation routes and docking points (Taylor 1966:69, 70). The success of the steamboat prompted ferry conversion to steampower by the Wiggin's Ferry Company in 1828 and by the Kerr Ferry Company in Venice somewhat later (East St. Louis Gazette 1903; Brink 1882:521).

## RIVER AND HARBOR CONTROL

Though steamboat operation was funded privately, both federal and state governments aided navigation indirectly by removing obstacles and deepening rivers. Beck, writing in 1818, described the most serious navigational problems:

"The Mississippi is obstructed by planters, sawyers, and wooden islands, which are frequently the cause of injury and even destruction to the boats which navigate it. Planters, are large bodies of trees firmly fixed by their roots in the bottom of the river in a perpendicular manner, and appearing no more than about one foot above the surface of the water, when at its medium height. So firmly are they rooted, that the largest boats running against them will not move them; but on the contrary they materially injure the boats. Sawyers, are likewise large bodies of trees fixed less perpendicularly in the river, and rather of a less size, yielding to the pressure of the current, disappearing and appearing at intervals, and having a motion similar to the saw of a saw mill, from which they have taken their name. Wooden Islands are places where, by some cause or other, large quantities of driftwood have been arrested and matted together in different parts of the river" (Beck 1823:15, 16).

In 1824, the first River and Harbor Act was passed appropriating \$75,000 to improve and maintain the Ohio and Mississippi navigation. Through the work of John Bruce and Henry Shreve, the worst of the snags between New Orleans and St. Louis were cleared by 1830 (Dobney 1978:21-23).

However, the dynamic nature of the Mississippi River continued to cause problems for St. Louis. The problem began around 1800, according to Tyson (1875:20):

"Below Bissell's point in 1800 near the Illinois shore a small sandbar lifted its head above the surface of the river. This was the first appearance of Bloody Island. A portion of the water passing between the Island and the Illinois shore being directed against the latter with some force began wearing it away. This wholesale destruction continued for twenty-five years..."

This process continued unhindered throughout the early 19th century resulting in the continued growth of Bloody Island (so named because it was a favorite "no-mans land" dueling site for Missouri gentlemen), the scouring of the Illinois shore, and sedimentation against the Missouri shoreline and formation of Duncan's Island. This progression is shown graphically in Figures 4 through 9. By the 1830s most observers recognized "the possibility that St. Louis might become a land locked city" (Dobney 1978:24). With that realization, an extensive program was implemented to eliminate Duncan's Island and turn the current of the Mississippi back to its original position against the Missouri shore. Dobney (1978:24-27) described these efforts:

"In 1833, the city leaders decided to take action. They hired John Goodfellow to plow up the sand bars with teams of oxen, thus loosening the sand so that high water would wash it away. The city spent almost



three thousand dollars on this project. In return, they received no diminution of the sand bars, but they learned the valuable lesson that a more sophisticated means would have to be employed to clear the harbor. As in the case of the navigation improvement, only the federal government had the means to undertake such a project. In December 1833, the Mayor of St. Louis wrote to the House Committee on Roads and Canals imploring governmental aid in removal of this hazard to the economic wellbeing of St. Louis. The committee responded in its report that 'a city so interesting should not be suffered to dwindle and decay if the interposition of legislative agency can prevent it.' Besides which, the bar also threatened the landing at the government arsenal just south of St. Louis.

After examining the harbor personally, General Charles Gratiot, Chief of the Corps of Engineers, stated that the problem could be overcome by constructing a wing dam from the Illinois shore to the head of Bloody Island (as the northernmost bar was called) and another from the foot of Bloody Island parallel to the Missouri shore, thus forcing the current west of Bloody Island and into the bar forming in front of the harbor (Figure 5)... Gratiot had in his Washington office a young engineer lieutenant who was anxious to get away from his desk job and into the field.

When the lieutenant volunteered to undertake this task, Gratiot agreed, and young Robert E. Lee came to St. Louis to try to restore and preserve the harbor...in June 1838 Lee began construction of the dike from the foot of Bloody Island parallel to the Missouri shore, since this course of action promised the most immediate reduction of Duncan's Island. The actual design was somewhat primitive but effective; a series of piles four to five feet apart were driven into the riverbed in two parallel rows. Then the forty foot area between the rows was filled with brush and rocks and the exterior side of the piles was covered with brush sloping away from the piles at an angle. The brush was weighted with rocks to hold it in place until it was made permanent by silt depositing against it..." (Dobney 1978:24-27, cited in Smith and Lange 1980:25-28).

Work had progressed well by the end of 1838 and the southern dike had been extended 2,500 feet from the foot of Bloody Island. The results were immediate: 700 feet of Duncan's Island disappeared and the shoal across the old channel between Bloody Island and Duncan's Island was deepened seven feet. In addition, the 18 foot wide channel east of Bloody Island had been filled until it was only 8 feet deep. However, the ice flow during the winter of 1838 formed a barrier at the head of Bloody Island, diverting the main flow of the river back into the channel east of the island and deepening the channel against the Illinois shore. This forced Lee into designing an alternate plan to start the wingdam further upstream above the town of Brooklyn so that the dike would be aligned almost parallel to the river. However, the operation was set back momentarily when Congress adjourned in 1838 without appropriating money for the St. Louis harbor project. Citizens of St. Louis raised \$15,000 to continue the work, and with authorization from the mayor and General Gratiot, Lee resumed construction (Bond 1969:42, 43). Dobney's (1978:27-29) account continues:



Captain Lee began construction of the slanting dike, using money provided by the citizens of St. Louis. Beginning on the Illinois shore he drove a double row of piles into the river bed, extending 1300 feet toward Bloody Island. Lee's plan was to intersect the dike at that point with another dike of a single row of piles running from the Illinois shore to Bloody Island. But by early November the weather intervened and the second part of the project was not completed...

...Lee had a small amount left in his account, and on August 12, 1839, he commenced construction of the dike to the head of Bloody Island. Lee himself worked beside his men "in the hot, broiling sun..." But after only two weeks of work, an Illinois property holder (in Brooklyn) secured an injunction against continuation of construction on the grounds that it threatened to lessen the value of his property by diverting the river. Although Lee considered the suit specious, he was forced to discontinue his efforts. Lee would return in the summer of 1840 to inspect his works and to write a final report, but further appropriations were not forthcoming from Congress; Lee's work in St. Louis was done...

The harbor was still not secure, however. The dikes constructed by Lee needed to be completed, strengthened, repaired, and maintained if the river was to be prevented from returning to the Illinois side of Bloody Island. This work was undertaken by the city when it became obvious that the federal government was not willing to expend the funds to complete the work. One of Lee's civil assistants, Henry Kayser, was named by the city to carry on the work at the city's expense...

In the five years after Lee left St. Louis he corresponded with Kayser, providing long distance guidance. By 1844 it was apparent that the completed portion of Lee's work had been "seriously injured" and that the Mississippi was continuing to eat away at the Illinois shore. Now, more than ever, a wing dam from the Illinois shore to the head of Bloody Island was needed to divert the current. Very few of the piles driven by Lee for the slanting dike extending from the Illinois shore remained... In 1843 Topographical Engineer Captain Thomas Jefferson Cram was sent to survey the St. Louis Harbor with an eye to possible improvement...(Dobney 1978:27-28, cited in Smith and Lange 1980:28-29).

Cram's survey and report (Figure 10) indicated the extent of erosion and sand bar building, and severity of the damage to the dike works by the devastating flood of 1844. "Cram calculated that between 1814 and 1844 the river had cut 1050 feet into the Illinois shore at a rate of 36 feet per year, and that the amount of water flowing between Bloody Island and the Illinois shore was fully 60 percent as great as that in the main channel of the river (Cram 1844: 353, cited in Smith and Lange 1980:29). Although Cram recommended extensive improvements totalling over \$190,000, the government failed to provide the necessary money" (Dobney 1978:28, 29).

In 1848, St. Louis decided to carry on the work without government support under the direction of Henry Kayser. However, this time the Alton City Council took exception and went to the courts to stop the project. The state of Illinois even went as far as ordering 20 militiamen armed with two cannons to the riverfront with orders to fire on any boat approaching the dikes (Reavis 1876:58-61).

One would expect the Wiggins Ferry Company to have had a very strong interest in the situation developing around the harbor improvements. In fact Wiggins had already purchased Bloody Island in 1819 in anticipation of the commercial potential the sandbar presented. However, by the mid-1840s the ferry company and Bloody Island were totally controlled by Andrew Christy and his sister-in-law, Melanie Jarrot Christy. The company showed its economic allegiance to St. Louis, in contrast to the Alton and Brooklyn dissenting factions, by contributing money to the St. Louis harbor project. Soon after, the Christy's acquired title to the rest of the island not covered by the 1819 purchase from the United States government for \$1.25 an acre. After settlement of the harbor controversy in 1849, the Wiggins Company gained control of the old channel area between the island and the Illinois shore, also for \$1.25 an acre (Figure 11). In 1847, the city of St. Louis and the Army Corps of Engineers, with cooperation by the Wiggins Ferry Company, began construction of a dike to the southern end of Bloody Island (Plate 2). The dike was placed from the foot of Brady Street across a portion of old channel more than 40 feet deep and included a stone-paved road to the island. The flood of 1851 swept the dike away and another dike was constructed to the north. When it was finished in 1858, it became the western terminus for the St. Clair County turnpike and later became known as West Broadway Avenue (Globe Democrat 1962; Reavis 1876:60-61).

In 1853 the Wiggins Ferry Company applied for renewal of its 1819 charter and petitioned for the right to build a city on Bloody Island, to run their ferry operation from the island, and "generally to engage in any business required by the exigencies of a city proprietorship" (Bond 1969:47). Protest from both sides of the river was loud. The St. Louis Republican expressed concern that "the city on Bloody Island, with all its wharves, lots, streets, and alleys, would probably belong from many generations to come to this incorporated company...St. Louis has felt...the evil of having a great mass of...property in the hands of one man or a few men" (Bond 1969:48). The St. Clair County state legislators protested to the state that the new charter would give the Wiggins Ferry Company a monopoly on all commercial traffic through St. Louis. Despite the concern voiced by many, the state of Illinois granted incorporation to the ferry with the right of perpetual succession. The stage was set for a new phase in the Wiggins Ferry Company operations with the advent of the railroad in the late 1850s.

Further north, the town of Brooklyn had been shut off from the river by the shoal created by Lee's dike. An injunction against the harbor improvements in 1839 had resulted in a settlement of \$1600 for Kerr's Ferry Company. However, because the Wiggins Ferry Company was awarded all of the channel fill inside the long dike all the way to Brooklyn, the Kerr Ferry was forced to move north in order to have direct access to the river once again. The settlement money was used to construct a bridge across the slough to connect the new island called Kerr Island with the mainland. The

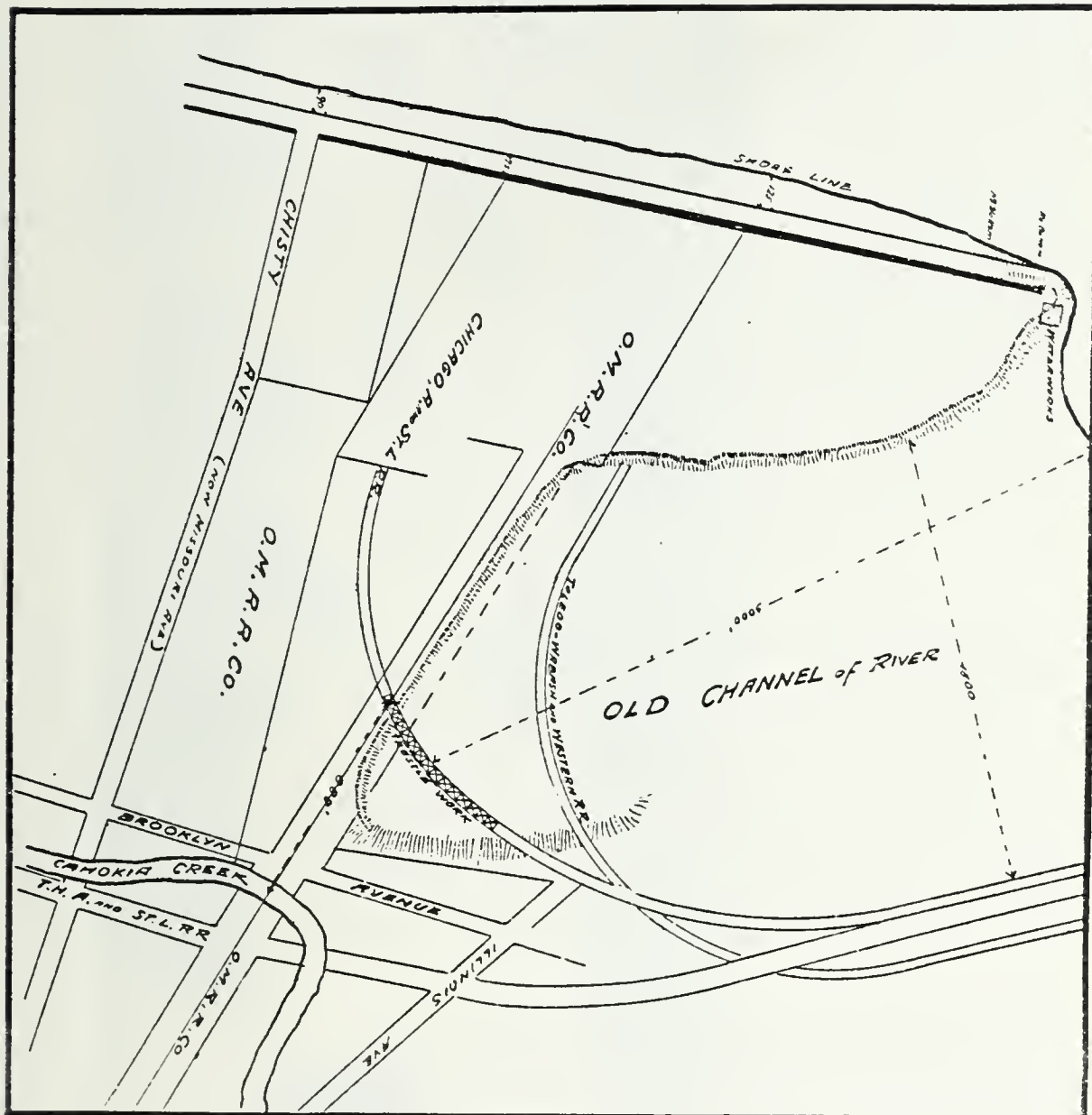


FIGURE 11. North End of Bloody Island in 1869. From a Report to the Illinois General Assembly, Shoreline Legislative Committee, 1911.





PLATE 2. Dike Construction in 1857. Source: Smith and Lange 1980.

settlement that grew up around this new ferry landing was called Venice (Brink 1882:521; Bond 1969:45). Brooklyn was to be forsaken by the move north to Venice. A once promising river town, it was killed by the harbor improvements that landlocked it, and the land acquisition by the Wiggin's Ferry Company that prevented it from moving west to the new shoreline. It was not until developments in the late 19th century provided a new economic base for Brooklyn to be reborn in the industrial revolution.

The new town of Venice achieved early prosperity as a ferry landing and terminus of the National Road (Brink 1882:521). This was the major east-west highway for transportation of bulk freight. Begun in 1815 by the federal government, it originated from Cumberland, Maryland, which had turnpike connections to Baltimore. From there, the road extended west, reaching Columbus, Ohio, in 1833 and Vandalia, Illinois, by mid-century when plans for its extension were abandoned (Taylor 1966:22). The connection to Venice that Bateman mentions was apparently not an official leg of the National Road but was one of the routes taken by travelers and freight carriers who continued through to the Mississippi River. This road terminated at Kerr Island with the "National Way," a 100-foot wide road leading to the ferry landing. This was the principal street of Venice.

The National Way became the commercial center of Venice with two hotels, two livery stables, three general stores, and two blacksmith shops. One of the hotels served additionally as a post office and as headquarters for the stockmen from Alton. Hogs and cattle were annually driven to the ferry for shipment to St. Louis via the "Slough Road" from Alton. The town experienced an initial boom with the passing through of the migrants heading west during the gold rush of the 1840s. However, in 1844, a flood swept away most of the buildings as well as the bridge over Kerr Slough. Venice was revived and resumed business until 1851, when again a flood swept away the town. This flood carried away buildings and much of the island, leaving the terminus of the National Way far out into the river (Brink 1882:521).

Beginning after the devastating flood of 1851, the business interests of Venice relocated to a safer location southeast of the original town. As the new site of Venice developed (Figure 12), old Venice became utilized more and more as a collecting point for passengers, stock, grain, and other commodities awaiting transfer on the Madison County Ferry. During the mid-19th century, a hotel for ferry passengers was established in old Venice along the north side of Bremen Avenue (the old National Way). However, following the flood of the 1851, the ferry operation was relocated to Ferry Street, near present-day McKinley Bridge. The ferry landed in St. Louis at North Market Street for passengers, horses, and wagons, and at Bremen Avenue for cattle (Fechte n.d.:1).

Throughout the 19th century the ferry locations at Venice changed with movement of the river and technological innovations in transfer facilities, with ferry establishments at the foot of the National Way (later Bremen Avenue), at the foot of Ferry Street, and north of Merchants Bridge.



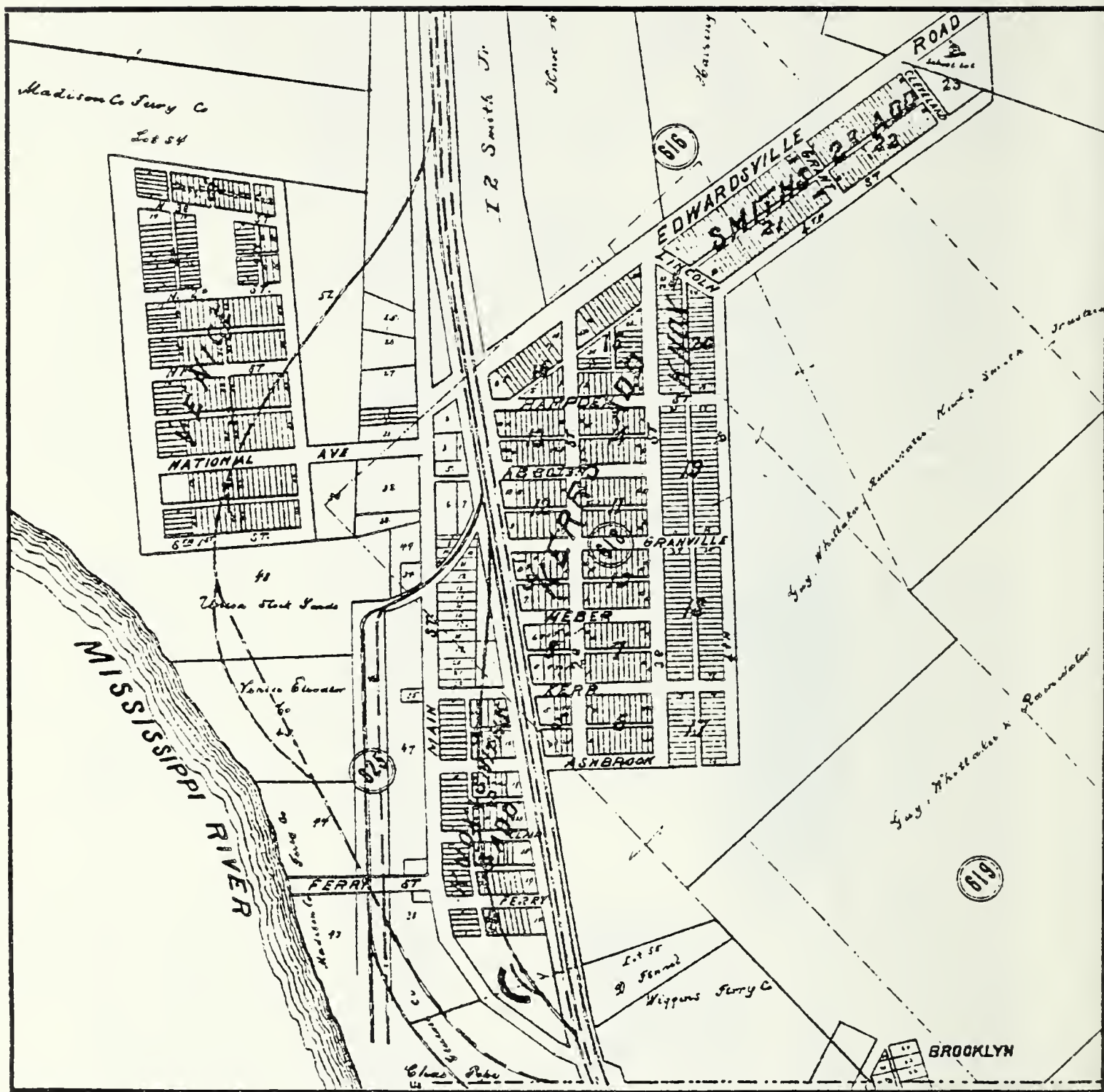


FIGURE 12. Venice in 1892. From an Atlas of Madison County, by Riniker, Haznauer, and Dickson.



## EARLY RAILROADS

The impetus for early railroad construction in Illinoistown was the growing market for coal as fuel and for the growing iron industries in St. Louis. The beds of bituminous coal were located in the bluff area between Collinsville and Belleville, requiring a six mile wagon transport to Illinoistown where the coal was ferried across by the Wiggin's Ferry Company. By 1836, over 300,000 bushels of coal crossed the Mississippi River from Illinoistown (Bond 1969:20).

The business was so profitable that in 1837 a co-partnership consisting of former Governor of Illinois, John Reynolds; Vital Jarrot; and others was formed to build a railroad beginning just south of Illinoistown and extending southeasterly over the Grand Marais (Pittsburgh Lake) to the coal mine, where a new town was planned to be named Pittsburgh. A saw mill was established in Illinoistown to furnish lumber for the railroad, which was built entirely of wood. However, the expense of building the railroad was greater than anticipated and the economic collapse during the Panic of 1837 almost broke the company until public support in the state of Illinois and the people of St. Louis gave them the financial assistance to finish the construction. The railroad was finished, and by late 1837 the first horse-drawn railroad car ran the six miles from Pittsburgh to Illinoistown (Boylan 1938:185-186).

The cost of the railroad was too much to bear for the partnership, and in 1838 all real estate and property was acquired by William C. Anderson of St. Louis. Anderson secured a charter under a corporate organization and upgraded the railroad to accommodate a small steam locomotive. The railroad was still not profitable, and was abandoned until 1859, when it was reorganized as the Pittsburgh Railroad and Coal Company. By this time the railroad had been extended to Caseyville near the bluffs and to Brooklyn just above Illinoistown, and was handling both passengers and freight. In 1869 the name was changed to the Illinois and St. Louis Railroad and Coal Company (Boylan 1938:188). Because the original coal railroad was conceived before Bloody Island had been attached to the mainland, the later Illinois and St. Louis Railroad and Coal Company had a terminus south of the island near the old Wiggin's Ferry landing (Figure 3b, Parcel 13).

With the exception of the Pittsburgh Railroad and Coal Company and its descendant, the major railroad construction in Illinois and the Midwest in general was during the late 1840s and 1850s. During this period there were two basic policies over how the railroad network should be designed. There were the grand schemes to connect the major cities of the east coast with the emerging centers in the West, and the "state policy" proponents who wanted to use the railroads to tie together cities within the state in accordance with the local special interest goals of enterprising cities like Chicago, Springfield, Alton, and Cairo. Because of the strong "state policy" feelings, plans to locate the Ohio and Mississippi Railroad from St. Louis to Vincennes to Cincinnati met with opposition because it would have strengthened the economic base of out-of-state rival cities at the expense of ambitious southern Illinois cities. At about the same time, the proposed Atlantic and Mississippi Railroad from St. Louis to Terre Haute was opposed in the state until Alton, Illinois, was suggested as the terminus (Cole 1922:32-45).

By the late 1850s several railroad connections had been completed in Madison and St. Clair Counties. The Terre Haute and Alton branch of the Atlantic and Mississippi Railroad was completed in 1855. However, before it was opened a collateral branch line to Illinoistown was secured, thus robbing Alton of the special advantages it hoped to obtain as a railroad terminus, while St. Louis interests capitalized, by means of a 25 mile connection, on all the work Alton financial backers had done to secure the railroad connection. The Ohio and Mississippi Railroad was opened from Illinoistown to Vincennes in 1855 and to Cincinnati in 1857. This important line was of vital interest to St. Louis, which contributed more than \$1,500,000 in financial backing. Prominent citizens in Belleville, Illinois, had also been enthusiastic backers of both the Ohio and Mississippi and the Mississippi and Atlantic Railroads, in hopes of being made a station on one or both lines. When the city was bypassed four miles to the north because of the overriding interests of St. Louis land investors and speculators in Caseyville, Belleville secured a branch line to Illinoistown and later another connection to Alton to connect with the Alton and Terre Haute Railroad. One other railroad line was in operation at this time. That was the old Illinois Coal Company Railroad that now operated between Caseyville and Brooklyn. This is significant in the fact that Illinoistown and the Wiggin's Ferry were bypassed at this time in favor of transfer connections with the rival Madison Ferry Company to the north (Cole 1922:45, 56; Bond 1969:28).

Alton did manage to forge a railroad connection north to Springfield in the late 1840s and by 1853 the road had reached Bloomington, thus enabling a connection to Chicago by way of the Illinois Central and the Chicago and Rock Island. Packet boats ran between St. Louis and Alton to handle the large passenger business (Howard 1972:247, 248; Cole 1922:48). The Chicago and Alton Railroad was a victory in state policy for Alton, but it was to be the last bid in Alton's battle for supremacy of southern Illinois. The narrow state policy that sought to keep railroad connections away from St. Louis and other rival out-of-state cities while building up rising centers like Alton had been bitterly fought by southern Illinois cities allied economically to St. Louis. By 1853, the state policy had been superseded by a legislative mandate for a more liberal railroad policy that was a recognition of the immutable trends in economics and transportation evolving in the nation to which Illinois had to accommodate or risk stalling and falling behind the rest of the country (Howard 1972:248; Cole 1922:44, 45).

The tremendous growth of canal and railroad transportation networks mirrored the economic competition between cities for control of the commercial hinterland. The struggle going on in the country throughout the 19th century between urban rivals was a facet of the rapid settlement of the frontier around trade routes, and the emergence of an urban hierarchy consisting of low-order towns serving as local collecting stations and, at the top, metropolitan cities that acted as regional market collection centers and concentrated commercial activities and services (Chudacoff 1981:66-68; Ward 1971:4, 5). This rivalry existed unilaterally on several levels as between metropolitan cities like St. Louis, Chicago, Cincinnati, Louisville, etc., and local towns such as Belleville, Illinoistown, and Venice. The competition also occurred between levels of the hierarchy as illustrated by the competition between the upstart Alton and the metropolis



of St. Louis. However, by the mid-19th century, St. Louis had for all practical purposes annexed Illinoistown and Venice, and had fought off the challenge of Alton, which now had to take its appropriate place in the urban hierarchy below St. Louis.

St. Louis had won the battle for southern Illinois supremacy against Alton. However, the years of squabbling over the harbor improvements and the Ohio and Mississippi and Atlantic and Mississippi Railroads had diverted energy that should have gone into protecting the St. Louis trade sphere from the Great Lakes cities. It was Chicago, not Alton, that was the biggest threat to the vast market area that fed into the midwestern steamboat network to St. Louis. First the canals and then railroads diverted more and more of the agricultural and lead trade north. The Illinois and Michigan Canal, completed in 1848 and connecting the Mississippi River to the Great Lakes, and the Illinois Central Railroad from Chicago to Cairo began a reversal in the direction of trade north to Chicago, bypassing St. Louis and New Orleans. The railroad connections to Alton, St. Louis, Galena, Rock Island, and other cities in the 1850s reinforced this trend. As St. Louis investors remained complacent that trade would always flow south with the direction of the river, aggressive speculators and investors in Chicago, backed by eastern capital, captured trade and redirected the national flow of products to an east-west orientation. By the eve of the Civil War, Chicago had 11 railroad trunk lines, whereas St. Louis and Illinoistown possessed less than half a dozen (Cole 1922: 51-52; Chudacoff 1981:66-68; Larsen 1976:147-148). The coming of the Civil War and blockade of southern trade hastened the redirection of the axis of trade along northern east-west lines via Chicago. St. Louis experienced military occupation, a cutback on trade, and close surveillance of goods, while Chicago prospered and expanded as the transportation and commercial center of the Midwest for the United States during the war (Chudacoff 1981:68).

#### POPULATION ON THE EVE OF THE CIVIL WAR

The decade between the early 1840s and the late 1850s was a period of rapid settlement in the American Bottoms towns. Despite some loss of population during the California gold rushes of 1849 and 1857 and immigration to Kansas and Nebraska, the deficit was easily made up by migration to Illinois from New England and Europe (Cole 1922:8-15). New England farmers were forced to migrate because their agriculture could not compete with western productivity when bulk shipments by railroads drove eastern prices down. Immigration from Europe came about as a result of economic disruption, crop failures, and famines as well as political and religious persecution (Howard 1972:221-222; Ward 1971:50-52). During this time 85 percent of all immigrants came from northwestern Europe, including the British Isles, Germany, British America, and Scandinavia (Ward 1971:53). In the American Bottoms, Germans and Scandinavians were attracted by the opportunities for land ownership as well as the commercial opportunities in St. Louis and surrounding towns. The demand for construction labor on the railroads and terminal facilities provided jobs for many immigrants, especially the Irish, who had fled their homeland during the famine following the potato blight of the late 1840s (Chudacoff 1981:101-105; Ward 1971:52-53).



The European immigrants brought about vast changes in the character of the cities and towns in the St. Louis area. The Germans brought with them new skills in brewing, printing, and other crafts; the Scandinavians achieved success in construction; while the English and Irish were distinguished in jobbing and retailing. The more skilled and enterprising European immigrants were quick to capitalize on the opportunities that the American free enterprise system offered and soon were among the commercial elite of the western cities (Chudacoff 1981:104, 105).

The coming of the foreign immigrants added to the social and economic changes that were coming about as a result of the railroad revolution and improving commercial conditions in the west. Better transportation opened up wider markets for agricultural goods and livestock. Manufacturing experienced a stimulus as raw materials and markets were brought nearer to the western factories. The result was a good economic climate for those who were able to take advantage of the opportunities presented. This was the beginning of both an industrial and urban revolution in the country, with a concentration in a mosaic pattern of various cultural and socio-economic entities, a forerunner of the industrial city to emerge later in the 19th century (Cole 1922:45-52).

## THE CIVIL WAR

The Civil War plunged Illinois into a period of political uncertainty and economic slowdown. President Lincoln faced strong opposition from both abolitionists, who wanted him to take a harder stand on the slavery issue, and anti-abolitionists or copperheads, who opposed the freeing of slaves. Some copperheads even went as far as proposing secession of the southern half of Illinois to the Confederacy. The influence of the strong anti-abolitionist movement in Missouri where slavery was legal and the close economic ties to the south in St. Louis was seen as a threat to the Union. Because of this southern element in St. Louis and the need to keep Missouri's resources for the north, the city was occupied in 1861 as were other areas along the border that were torn between the Union and the Confederacy. The criticism in the north, mainly from the Democrats, was viewed as dangerous disloyalty by Lincoln, who suspended the writ of habeas corpus and allowed many pro-southern civilians to be arrested and held (Howard 1972:307-310; McReynolds 1962:211-217). Much of this protest was over the usurpation of governmental and economic control by the Union military occupation and suppression of freedom of speech and the press (Cole 1922:304, 305).

The end of the war found very mixed economic conditions existing in Illinois. The blockade of the southern commerce and the war effort in the north had helped to push the state into industrialization, as well as a diversification and intensification of agriculture to replace that which was cut off by absence of southern trade. Employment and wages had risen some, though they were negated by the rise in the cost of living and escalating inflation. The drain of manpower during the war was followed by an increasing demand on the working class. This provided a stimulus for organized labor, and laid the foundation for the confrontation between labor and industry to occur later in the century (Cole 1922:364-372).

## DEVELOPMENT OF BLOODY ISLAND

The years between the 1850s and the 1860s were significant in the expansion of the urban core and differentiation of land use activities in Illinoistown and Bloody Island. The transportation-related activities of the Wiggin's Ferry Company had always been clustered along the riverfront, and were separated from Illinoistown by Cahokia Creek. Following the connection of Bloody Island to the mainland and movement of the ferry to the new riverfront on the west end of the island, ferry-dependent services including railroads and other commercial activities began the move from Illinoistown to the island. This was accompanied by much conflict as Bloody Island attempted to separate itself from Illinoistown and maintain an independent commercial municipality. This process began in the mid-1850s with the entrance of the railroads.

The first railroad into the area, the Ohio and Mississippi Railroad, entered the town via Fourth Street and extended south for a mile to the Wiggin's Ferry landing on the old shoreline south of Illinoistown. After completion of the new dike road at Broadway Avenue, the Ohio and Mississippi Railroad established a terminus in Illinoistown on lot 4 of block 28 between Main Street and the St. Clair County turnpike. Other railroad companies, including the Belleville and Illinoistown; the Terre Haute, Alton, and Chicago; and the Chicago, Alton, and St. Louis, clustered on the east side of Cahokia Creek opposite the dike road. From this point the railroads transferred passengers and freight by omnibus and wagon over the dike to the new ferry landing (Reavis 1876:60-63).

The year 1857 marks the real beginning of development of Bloody Island into a major railroad terminus. Though the Wiggin's Ferry won ownership of Bloody Island and right to build a city in 1853, the platting of the island into streets and town lots did not occur for another decade, thus having to accommodate the early railroads. Beginning about 1857, the ferry company began selling riverfront property to the railroads for use as terminal facilities. During this period of rapid railroad construction between 1855 and 1875, the Wiggin's Company cleared a nice profit on these real estate ventures, and assured the ferry company of a booming business in transferring Missouri-bound freight from Bloody Island to St. Louis. Plate 3 depicts Bloody Island as seen from St. Louis in the late 1850s after the railroad had relocated from the mainland to the island.

The first railroad to stake a claim to riverfront property on Bloody Island was the Ohio and Mississippi Railroad. Completed to Vincennes in 1855, it was officially opened in 1857 when the tracks were connected to Cincinnati. The Illinoistown to Alton link of the Chicago, Alton, and St. Louis Railroad entered the island around 1855. Originating from the north, it followed the old Illinois shoreline through Venice and Brooklyn, curving sharply toward the river and crossing the old river channel via trestle at a point on the shoreline opposite the north end of Bloody Island, thus enabling a terminus perpendicular to the Mississippi River. Figure 11 depicts the access routes and property of the Ohio and Mississippi Railroad and the Chicago, Alton, and St. Louis Railroad in 1869.

The Terre Haute and Alton Railroad and the Belleville and Illinoistown Railroad consolidated as the Terre Haute, Alton, and St. Louis Railroad in



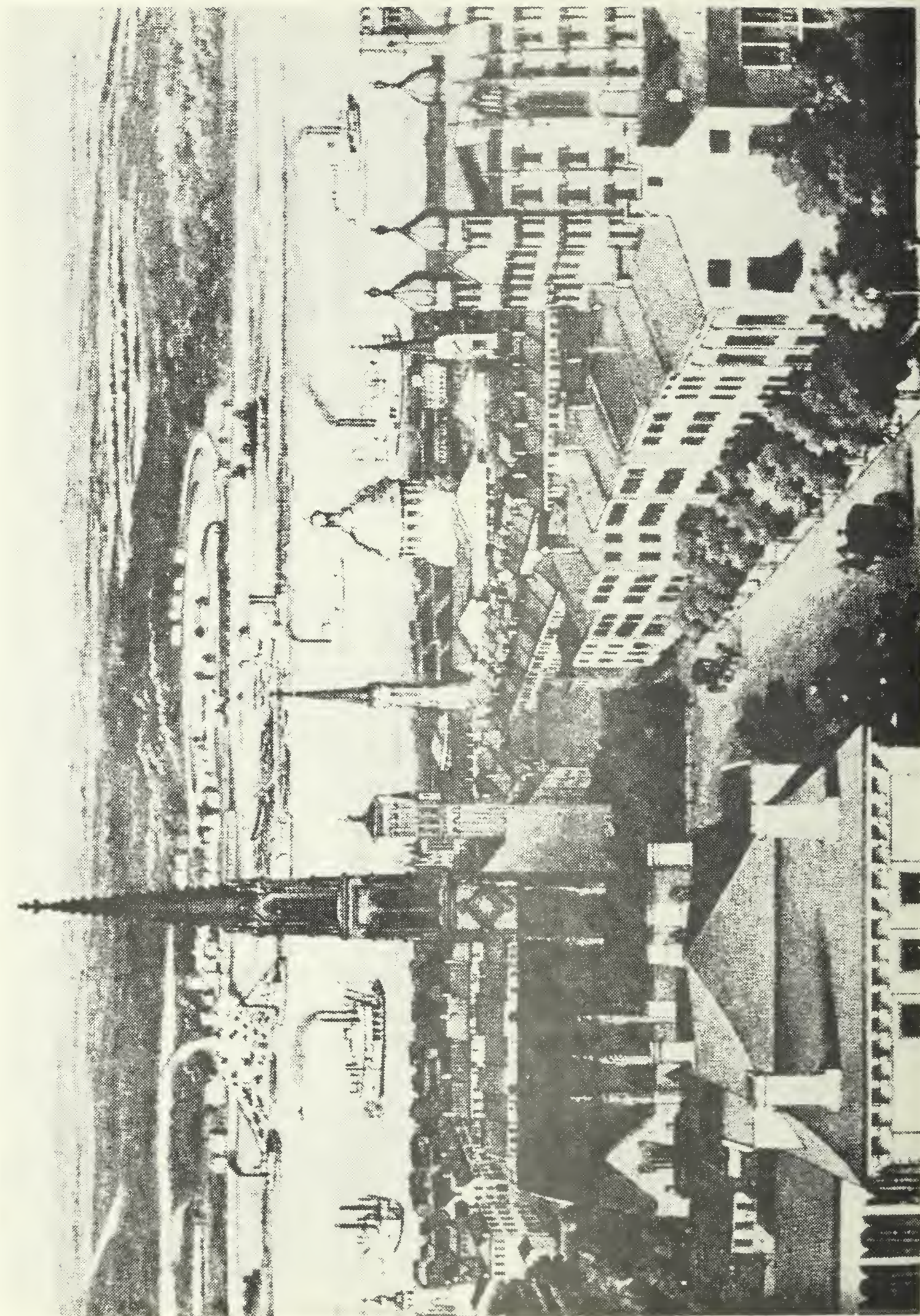


PLATE 3. Illinoistown in the 1850s. View from St. Louis. Source: The American Heritage Picture History of the Civil War.



the mid-1850s. In 1861 the TH,A,& St.L Railroad was reorganized into the St. Louis, Alton, and Terre Haute Railroad. In addition this railroad leased the Cairo Shortline Railroad from the Belleville and Southern Illinois Railroad. In the reshuffling that followed, the St.L,A,& TH Railroad exchanged a tract of land between Crook and Trendley Streets with the Indianapolis and St. Louis, and the Cairo Shortline for a station between Bogy and Pratt Streets; the Illinoistown Roundhouse was leased to the Indianapolis and St. Louis Railroad (Reavis 1876:60-64).

By the end of the Civil War the railroads with a terminus on Bloody Island included the Ohio and Mississippi; the Chicago and Alton; the St. Louis, Alton, and Terre Haute; and the Cairo Shortline. These four railroads were the major occupants of Bloody Island until the late 1860s and early 1870s. There do appear to have been other non-railroad occupants of Bloody Island before it was platted. One local informant reported that her great-grandfather settled on the island in the early 1850s and set up a business supplying steamboats before the railroad came in (personal communication 1981).

The Civil War years were marked by increasing enmity and distrust between Bloody Island and Illinoistown. Bloody Island had a reputation for harboring lawless characters that was not helped by the St. Louis courts, who viewed the island as a Botany Bay, and encouraged Missouri criminals to forsake St. Louis for the island. The city of Illinoistown wished to bring the island under municipal control in order to stem the rising crime originating from there, and to recover some of the commercial tax base that the island had drained off during the exodus of business to the new ferry landing. In addition Illinoistown wanted to exert some control on the Wiggin's Company, which had blocked off access to the riverfront to non-ferry commercial use (Reavis 1876:68-69.)

The campaign to consolidate the area under one charter began in the decade before the Civil War. In the mid-1850s, Page and Bacon, two bankers from New York, bought 1400 acres consisting of the old Richard McCarty tract, John Jacob Astor's lands, and a parcel belonging to Vital Jarrot. They sold a large tract to the Ohio and Mississippi Railroad, and in 1858 sold the remainder to New York investors Aspinwall, Comstock, Chauncey, and Barlow. In 1859 the area was platted and incorporated as the town of Illinoistown. The same year the incorporated city of Illinoistown and the town of Illinoistown, and the area in between consisting of the town of St. Clair were incorporated as East St. Louis.

The Civil War and military occupation of the east side saw a worsening of the security of East St. Louis as the marauding elements in and following the Union army added to the overall lawlessness created by the criminal element on Bloody Island. To combat the danger, East St. Louis formed a vigilante committee and volunteer fire department to maintain order. S. W. Toomer was made captain and John Bowman was appointed secretary. The vigilante committee, performing as a police force around the city, was relatively successful in stemming the tide of crime originating from the island. However, in 1863 the committee clashed with the island over railroad policy and the protection of the city from floods.

East St. Louis was protected from high waters by the railroad embankments of the Ohio and Mississippi; the St. Louis and Southeastern; the St. Louis, Alton, and Terre Haute; and the Cairo Shortline, except for an open culvert in the Ohio and Mississippi Railroad embankment between Third and Fourth Streets. When the waters began rising following heavy rains in 1863, East St. Louis had the culvert closed. It was promptly reopened by the Ohio and Mississippi Railroad who feared damage to the embankments from the water pressure. The city closed it again and placed a guard over it. United States troops were sent in by President Bacon of the Ohio and Mississippi Railroad, and a riot ensued. The citizens were driven away with bayonets and the culvert remained open. The city sustained damage from the flood (Reavis 1876:69).

Most of the confrontations between the city and the island were economic or political. In 1861 the island chartered the St. Clair County Turnpike Company to build a tollgate over the dike road and charge a fee to East St. Louis residents for use of a road that the company had not even built. In 1863 the city again tried to bring the island under municipal control, though again the Wiggin's Ferry Company defeated it in the state senate where its influence was considerable. Soon after, the Wiggin's Ferry attempted to make the island a separate municipal city, but was beaten by East St. Louis. A compromise charter was finally drawn up in 1865 by John Bowman that, despite being stolen once in the lower House of Representatives, was finally passed with great concessions to the Wiggin's Ferry Company and the toll gate company. John Bowman was elected mayor of the new city of East St. Louis (Reavis 1876:69-73).

Later that year Bloody Island was surveyed by the St. Clair County surveyor. The island was platted into 734 town lots within a street plan consisting of 11 streets perpendicular to the river and four parallel streets. Because much of the area between the island and the mainland was old river channel, the street plan of Bloody Island closely defines the eastern limit of the original sandbar at the edge of the old channel. It would be years before the old channel was filled and put to use. It would remain a large pond and the source of much annoyance during the frequent floods that fed the pond via Cahokia Creek.

East of the old channel was the original shoreline that consisted of about 200 to 300 feet of land between Cahokia Creek and the old river channel. Located on this old shoreline was the road between Illinoistown and Brooklyn that had served these two communities since the 1820s. The road was retained in the town plan and designated Brooklyn Avenue. However, because the railroads were using the original shoreline between Brooklyn and East St. Louis as an access corridor to Bloody Island, the old road was terminated at its junction with Illinois Avenue, while north-south traffic shifted east to St. Clair Avenue. Also located on the old shoreline, but south of Dyke Street, was a subdivision around Crooks and John Street. This may have been part of the town of St. Clair platted by John St. John in the 1830s.

The growth of Bloody Island as a railroad terminus brought many immigrants to East St. Louis to initially work in railroad construction and later, as roundhouses, engine houses, and freighthouses were constructed, the labor was needed to carry on the functions associated with railroad



service and maintenance activities. To augment the very limited housing available for the immigrant workers, the Wiggin's Ferry Company constructed single and multi-family tenement houses on the island and offered them for sale on an installment plan (Reavis 1876:72-73). To help its image, the company also donated land for a school and contributed \$6,000 towards its construction. The school, called Douglas School, was destroyed by fire in the mid-1870s and was reconstructed. It was rebuilt with limestone and brick and destroyed again in the cyclone of 1896.

The Wiggin's Ferry Company could afford to be generous during this period. The windfall profits acquired from selling real estate to the railroads, as well as the monopoly on freight transfer between Bloody Island and St. Louis, had made the Wiggin's Company one of the most prosperous in the St. Louis area. Operating in conjunction with the St. Louis Transfer Company, which transferred freight between the railroad yards and the ferry, this combination enjoyed the security of a monopoly for many years. However, in 1864 a rival transfer operation, the East St. Louis Transfer Company purchased the Madison County Ferry that operated between Venice and St. Louis, thus offering the first real challenge to the Wiggin's-St. Louis Transfer Company monopoly. The East St. Louis Transfer Company quickly jumped out in front in 1869 with an innovation that enabled the direct transfer of railroad freight cars, without breaking bulk to load the freight from the railroad car to the ferry boat. The Wiggin's Company soon introduced the same service, which involved the use of inclines and barges (Plate 4a), and shortly regained domination, transferring 18,775 carloads of freight between 1872 and 1873 (Baldwin pers.comm.).

The incorporation of Bloody Island into East St. Louis and the continued prosperity of the railroad and ferry business did not lessen the conflict between the Wiggin's Company and the city. Though the St. Clair County Turnpike Company had been given a concession by the charter, Mayor Bowman intended to break this stranglehold on access to the riverfront by constructing an alternate route. In 1861, Bowman began this venture as a private enterprise by collecting subscriptions for construction of a bridge across Cahokia Creek at the foot of Missouri Avenue. Mayor Bowman, Vital Jarrot, and other prominent businessmen who sponsored the new road also proposed a plan to redivert Cahokia Creek to above East St. Louis near Brooklyn with levees to connect to the Front Street levee.

The Wiggin's Company responded to this impudence by having the legislature amend the city charter to prevent exercise of eminent domain in developing the Missouri Avenue side of town (much of which was owned by the Ohio and Mississippi Railroad Company). In addition, the new charter provided for a shorter mayoral term and a second term was prohibited. The legislative amendment went even further and put the police force of the city in the hands of a board of commissioners appointed by the legislature (Reavis 1876:76).

The city council, which consisted of pro-administration East St. Louis supporters, voted to resist the takeover by the state-appointed metropolitan council made up of pro-island Wiggin's Company supporters led by Thomas Wilder, postmaster of East St. Louis. In 1878 Bowman served notice that the aldermanic election would be held under general state law instead of under special legislative act. His opponents declared that the notice



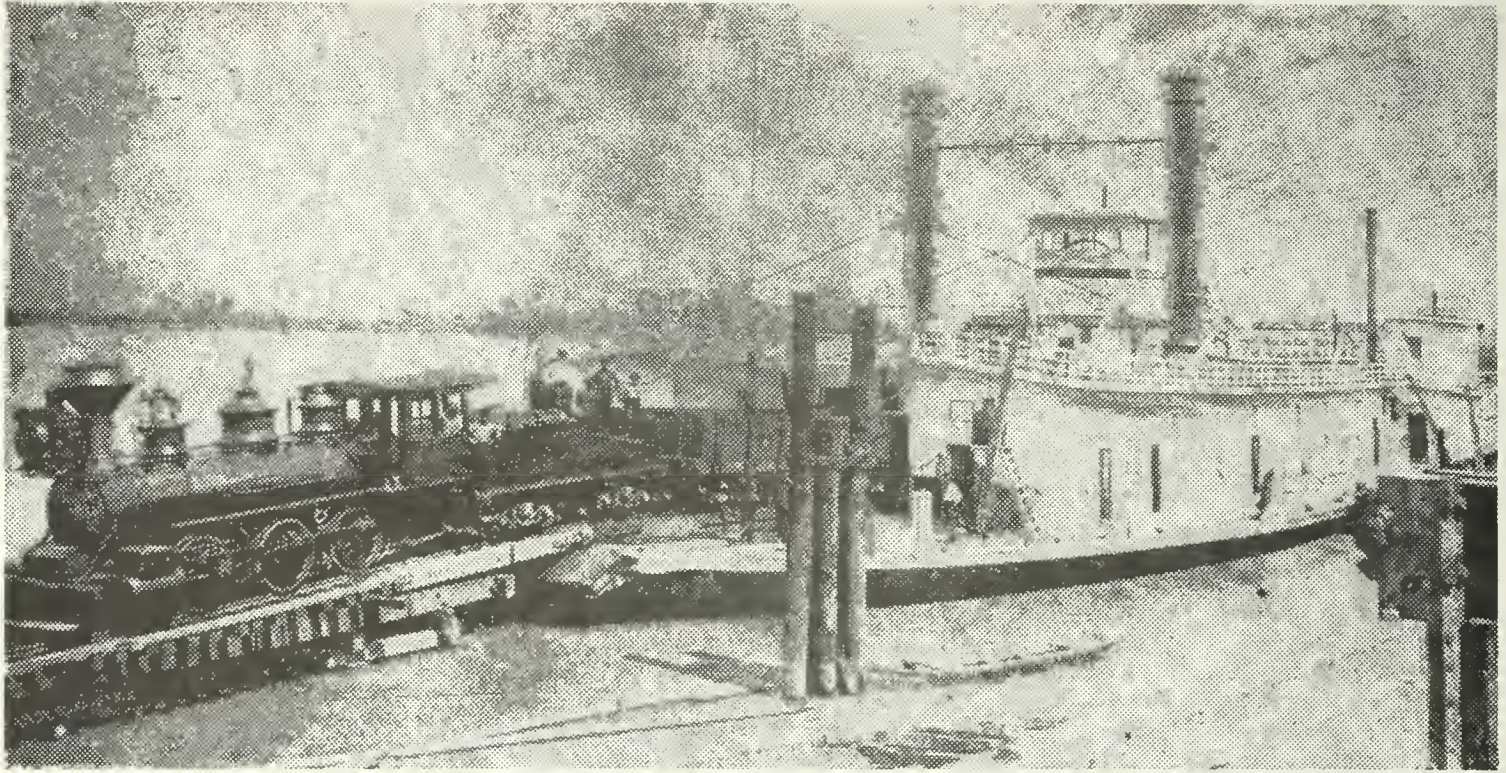


PLATE 4. A. Wiggins Ferry Company Boat Unloading a Train at the Bloody Island Landing. Courtesy of the Missouri Historical Society.

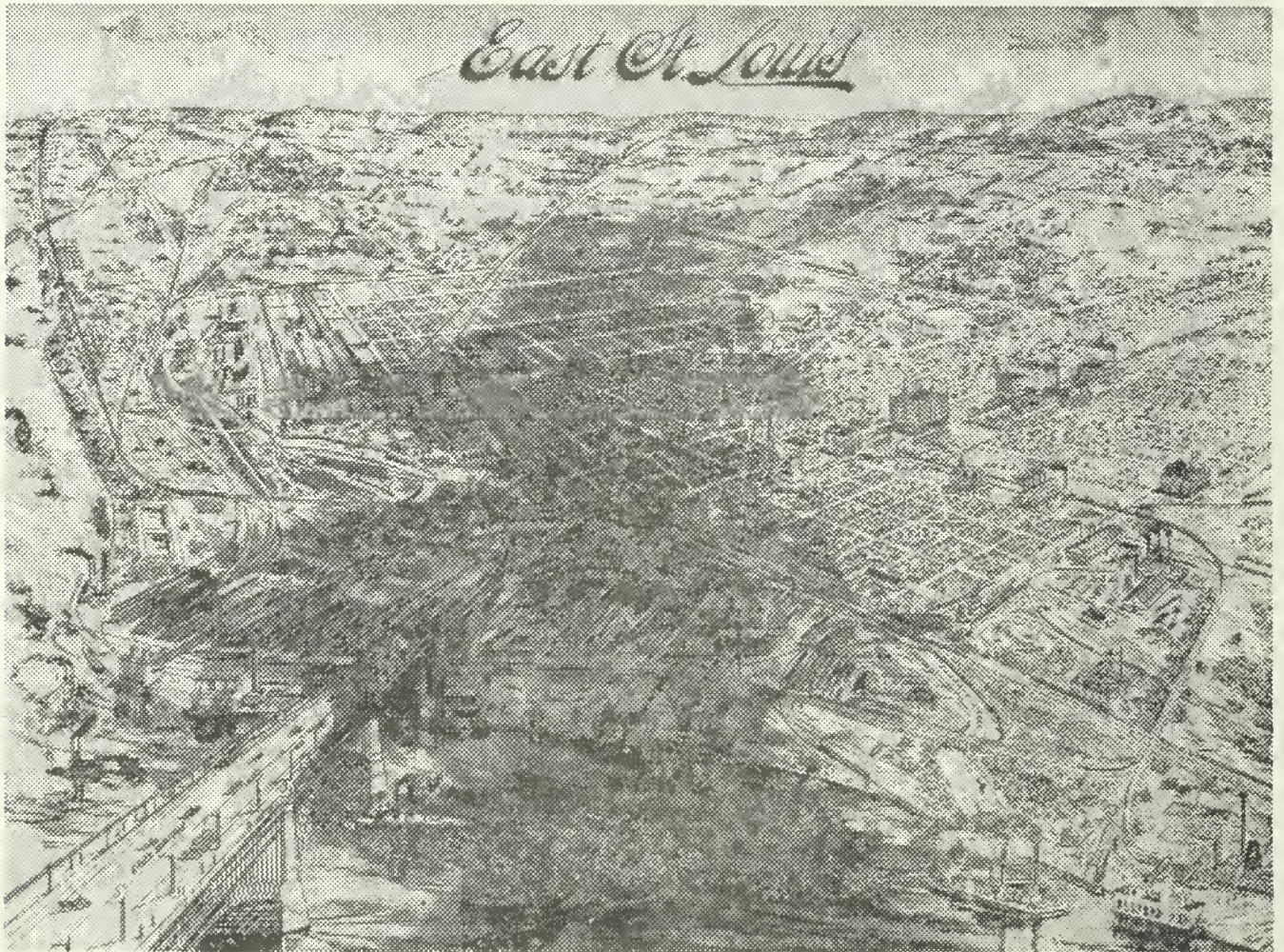


PLATE 4. B. Bird's Eye View of East St. Louis Showing the Path of the 1896 Tornado. View is to the East. Courtesy of the Missouri Historical Society.



was illegally filed and declared that the metropolitan council would serve. They held a meeting in the police station and elected their own mayor, while at city hall, Bowman appointed his own police force. For several months the city of East St. Louis had two mayors, two city councils, and two police forces. Bowman's police department made two attempts to capture the metropolitan police station and were driven off. Finally the fight was taken to the Supreme Court. Both city councils were declared illegal and the system of state-appointed police commissioners was declared unconstitutional (Reavis 1876:75-77; miscellaneous documents file 1915).

The Bowman-metropolitan political episode was only a preamble to the violent politics that would continue in East St. Louis in the late 19th and early 20th centuries. As Judd and Mendelson (1973:8) note:

"At one point the city was racked by a bloody riot that broke out during the final stages of an election campaign, and it took the Illinois State militia to restore order... In the 1880's elected city officials absconded with the city treasury and burned down city hall to destroy the municipal records. Shortly after the building was reconstructed, its vault was dynamited to make it appear as though the treasury had been robbed, when in actuality most of the city's money and bonds had been stolen. Soon after, in 1885, former Mayor John Bowman who had advocated honest government was assassinated. His death catalyzed the election of one of his followers who for a brief period brought honesty, and a semblance of order to East St. Louis government."

The assassination of John Bowman brought to a close the illustrious history of a man who brought East St. Louis through the stages from a small ferry town to a rising transportation and manufacturing center. Always quick to rally opposition against a force which he perceived as contrary to the best interests of the city, Bowman ruled the east side with an iron hand. From the political battles with the island faction, Bowman went on to fight the Illinois and St. Louis Railroad's attempt to force an easement through the St. Clair section of the city. He pushed for a high grade policy to protect the city from floods, he sympathized with the plight of the railroad workers, volunteered his diplomatic expertise to the cause of the General Strike of 1877, and advocated public access to the waterfront being held by the Wiggin's Company.

Bowman was a revolutionist as a young man, participating in the 1848 Revolution in Germany or Austria, and later was a member of the London-based Fraternal Democrats, made up of Democratic Nationalists. He remains an enigmatic figure in East St. Louis history. He has been perceived as both a socialist for his championing of the unskilled workers, and as a corrupt city boss for his work in bringing in much of the big business and railroads and totalitarian rule of the east side. Bowman apparently straddled the gray area between aggressive progressive policy and machine politics. After his death in 1885, he was praised as a friend of the railroad corporations, while at the same time unionists charged that he had been murdered by the Pinkerton Detective Agency at the order of the corporations (Burbank 1966:28).

## THE EADS BRIDGE

Officers of both the Wiggin's Company and the East St. Louis Transfer Company, as well as the city of East St. Louis, watched with growing interest the plans for connecting East St. Louis with St. Louis by a bridge spanning the Mississippi River. Since 1836 engineers had been telling a skeptical public that the bridge was technologically feasible, though the undertaking would have required an enormous amount of capital, and thus was never seriously considered until after the Civil War (Bond 1969:51).

An attempt to charter a bridge company in Illinois was successfully blocked by the Wiggin's Ferry Company in 1865. However, in 1867 a company was organized in Missouri called the St. Louis and Illinois Bridge Company with Charles Dickson, president; J.C. Cabot, secretary; and J. H. Britton, treasurer (Bond 1969:52-54). The job of chief engineer went to James B. Eads, a former officer in the Union navy and builder of the ironclad gunboats. The Eads plan consisted of arch bridge with two end spans of 502 feet and a central span of 520 feet.

Opponents to the Eads plan were quick to surface. A rival company, the Illinois and St. Louis Bridge Company, was formed in Illinois, and promoted by Chicago bridge contractor L.B. Boomer. The Boomer Company proposed a plan for a truss bridge with shorter spans, not exceeding 350 feet. The Illinois and St. Louis Bridge Company was soon backed by John Keokuk, president of the Northern Line Packet Company, who represented concerned steamboat, railroad, and merchant interests. The company was also joined by the city of East St. Louis, other river cities, and the Wiggin's Ferry Company in opposing the Eads plan (Eads Bridge Collection).

Some of the strongest opposition came from the steamboat companies who wanted a straight truss bridge with a minimum height of 50 feet above the high water mark of 1844 to permit safe passage of steamboats. Following a meeting of all concerned parties, Eads took the final plan to Washington to frame the law. However, once in Washington, Eads disregarded the compromise plan of the rival Illinois and St. Louis Bridge Company, and lobbied for a law that stipulated an arch bridge with a minimum height of 50 feet above the highwater mark of 1826, which was  $7\frac{1}{2}$  feet lower than the flood of 1844.

In addition, the height was set for the center span rather than the end spans as requested by the steamboat committee. The steamboat coalition decried the Eads plan: "The damage to commerce in the next twenty years will be more than the entire cost of the bridge, for the reason that no steamboat of ordinary size can get below the bridge nor can go above it, therefore the cost of getting produce from the upper boats to the lower ones will almost be a prohibition to shipping produce from the Missouri, Mississippi, and Illinois Rivers to the south...the steamboatmen are determined to have an investigation...the parties that passed the law-Congress are responsible... the Bridge Company does not answer the claim that they are obstructing traffic, they say they are building it according to the law" (Eads Bridge Collection).

Boomer's Illinois and St. Louis Bridge Company had a final ace in the hole. They had been awarded exclusive right to build a bridge within the



next 25 years. If the Chicago investors built the bridge, they could drain St. Louis business for tolls and gain a stranglehold on the city's commercial future. If they sold the privileges to the Wiggin's Company, any bridge construction could be halted for 25 years (Reavis 1876:79).

Opposition quickly mounted and the fight was carried to Washington in an attempt to stop the bridge. Despite vocal opposition, the publicity served to win general public support for the Eads plan. Eads, fearing the consequences of a well organized movement against the bridge, worked out a compromise with the rival bridge company, and in 1867 they merged (Bond 1969:55). The merger apparently served mainly to give the Chicago-based bridge company a share of the company stock, since the Eads plan remained unchanged. However, it was enough to dampen the spirit of the special interest groups that had backed the Boomer Company, and so construction proceeded unhindered.

Construction began with placement of the channel piers. Caissons, watertight chambers inside which workmen could perform underwater, were used to excavate the alluvial river bottom to bedrock. The work on the piers was proceeding smoothly until the setback suffered from a tornado on March 8, 1871. The tornado swept in from the southwest, descended over the river, scattered scaffolding, derricks and engine boats, and swept Bloody Island's railroad yards: "lumber yards were swept clean, all frame houses in the ill fated path were dismembered and blown away. Not a stick was left to mark the station of the Belleville Railroad but the piles upon which the building rested...a locomotive of the Wabash Railway weighing some 25 tons was actually lifted bodily from the track and thrown upon its back" (Kirschten 1965:64, 65).

However, no serious damage was done to the bridge construction, and by 1872 the piers had all been laid to bedrock and the approach arches across the levees in East St. Louis and St. Louis completed (Plates 5 and 6). By early 1874 all that remained was construction of the supports for the 75 foot-wide carriage highway on the upper deck and the double railroad tracks on the lower level. On June 9, 1874, the first train crossed the Eads Bridge (Bond 1969:55-64).

The eastern approach to Eads Bridge was described as "a grand highway" that was carried "across a space of some sixty feet on immense steel column, which support great iron girders." The road divided and descended with the carriage road dropping at a rate of about three feet to the hundred and the railway descending at a proportion of one foot to the hundred. The railway tracks of the bridge connected with the tracks of the St. Louis and Vandalia Railroad in East St. Louis, while the carriageway descended to Dyke Street (Broadway) on Bloody Island (Bond 1969:63). The Wiggin's Ferry Company fought hard in competition with the new bridge. This partisan newspaper story came out shortly before the opening of Ead's Bridge:

"The Wiggins Ferry Company continues to make crossings and scoop in the dimes from an enlightened and generous public, to a limited extent, however, but intends to make a bold vigorous fight with the bridge for passenger travel, by putting on a handsome tug of some 54 tons, capable of carrying comfortably one hundred passengers. The



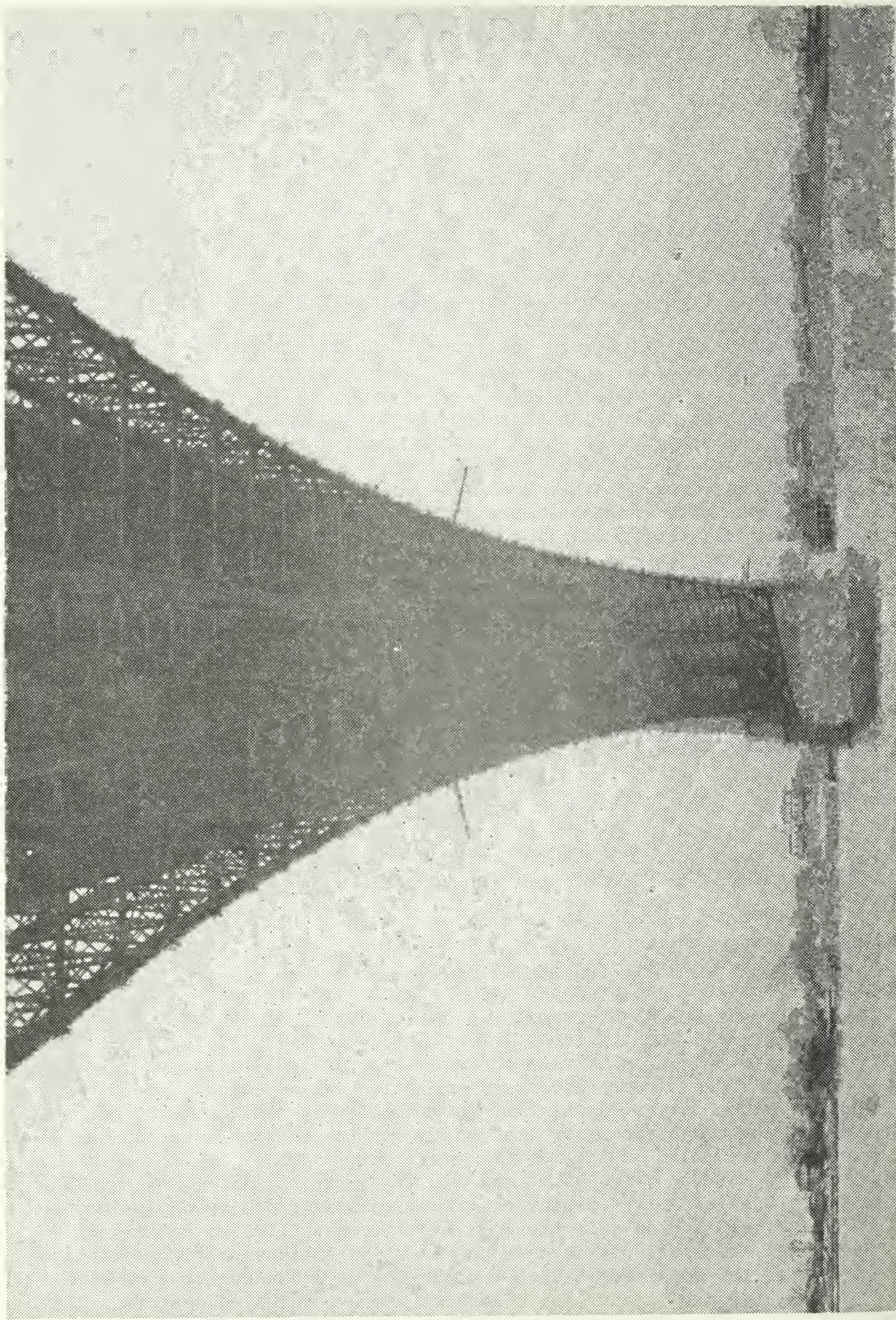


PLATE 5. Construction of the Eads Bridge during the 1870s, a View from Below. Courtesy of the Missouri Historical Society.



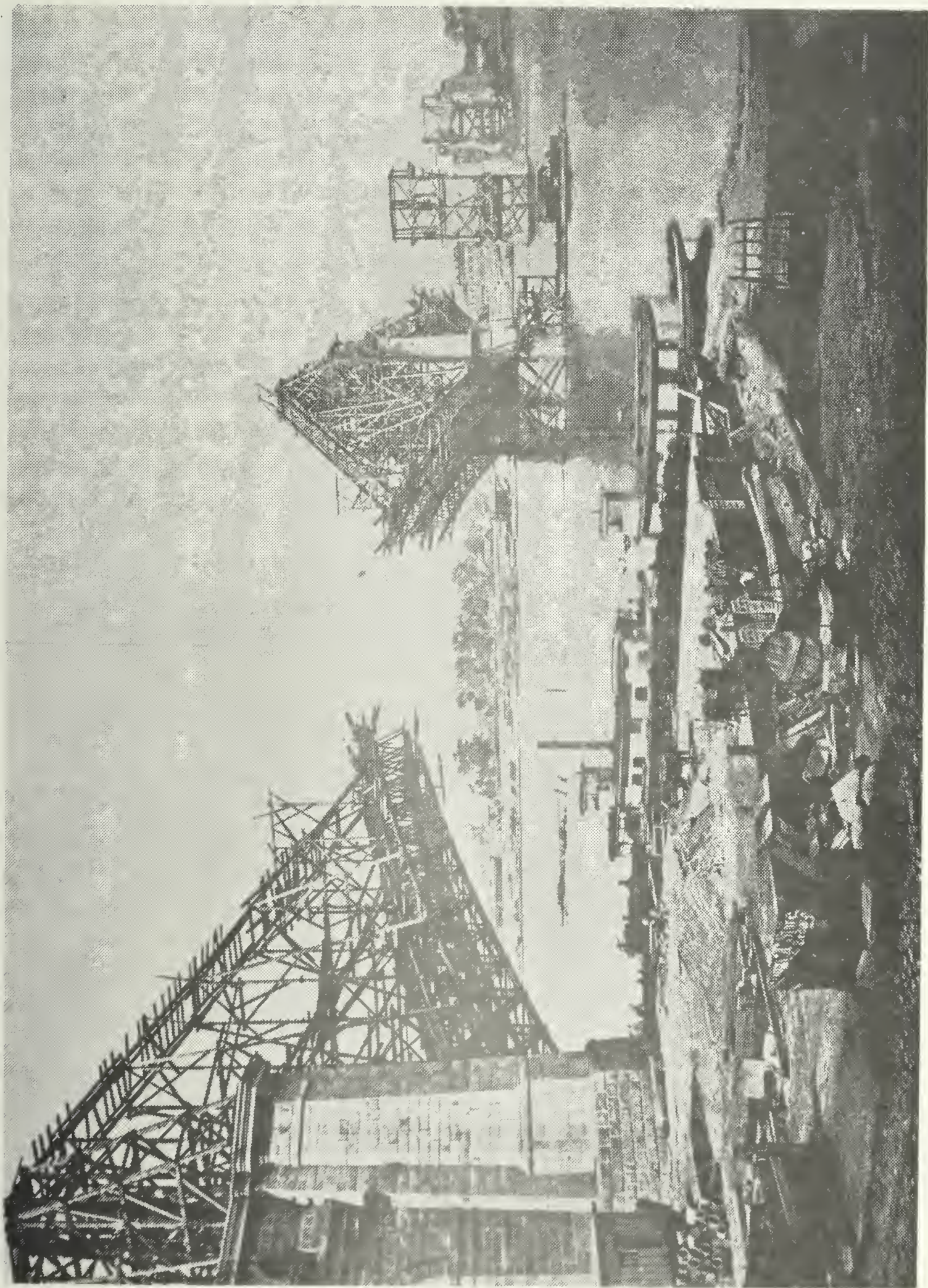


PLATE 6. Construction of the Eads Bridge during the 1870s. View is to the Northeast. Courtesy of the Missouri Historical Society.



landing will be immediately at the foot of Washington Avenue on the south side of the Bridge, at which point the company has reserved the promise of a location for a wharffloat with covered accomodations for the waiting public... and when the debris of bridge rubble is removed from the rear of the bridge, the D.W. Hewitt will at once commence her regular trips to a convenient point immediately to the south side of the Bridge on the Illinois Shore and back up against the great Bridge for public patronage" (Eads Bridge Collection).

This new passenger ferryboat was a move in a different direction for the Wiggin's Company, who prior to 1874 treated passengers as of secondary importance, crowding pedestrians aboard with freight and transfer wagons. By the time the D.W. Hewitt was put into service, the rate had been dropped to a nickel per passenger. Wiggin's Ferry Company advertised that they would "spare the traveler the long tedious walk over the bridge during hot weather" (Baldwin n.d.). The bridge company countered these moves by offering pedestrians free ice water and drew publicity by staging free musical concerts on the bridge (Baldwin pers.comm.).

The strong competition for the passenger service between the Wiggin's Company and the Eads Bridge was only a preliminary skirmish to the hot battle that would be waged over the freight transfer business. The Wiggin's Company was given a reprieve for about fifteen years after the bridge was opened while the necessary transfer and terminal facilities were constructed by the bridge company. To accomplish this, the Union Railway Company of Illinois was incorporated in 1874 to run the new St. Louis terminal facilities and to provide locomotives to transport trains from Illinois to St. Louis (Baldwin n.d.).

The Wiggin's Company used the borrowed time to consolidate the railroad transfer business by leasing the Madison County Ferry in 1885, then owned by the East St. Louis Transfer Company. To retain the wagon freight transfer business, the Wiggin's Company reduced freight rates from 9 cents per hundred pounds to 5 cents to match the rate set by the bridge company; as a further incentive, the Wiggin's Company provided a barrel of free whiskey for those transfer drivers who patronized the ferry company. Aside from some specialized ferry facilities relating to the transfer of marble, limestone, coal, and sand located south of East St. Louis near East Carondelet, the Wiggin's Company now controlled all railroad transfer operations from East St. Louis, Brooklyn, and Venice.

Things looked gloomy for the Wiggin's Company, however, with the formation of the Terminal Railroad Association in 1889 at the completion of the St. Louis terminal facilities. The association formed by the Wabash Railroad; the Missouri Pacific; the Cleveland, Cincinnati, Chicago, and St. Louis; the Louisville and Nashville; the Ohio and Mississippi; and the St. Louis, Iron Mountain, and Southern Railroads began to immediately cut into the ferry business. After having monopolized the transfer business prior to the opening of Eads Bridge, the total amount of ferry transfer of freight, counting both the Wiggin's Company and its ferry competitors, amounted to just under one-half of the total in 1882, with the complement going to the bridge company. It was down to one-third in 1885, a little more than one-fourth in 1888, back up to two-fifths in 1890, and then down again with only one-third of the freight transfer business in 1896 (Baldwin



pers.comm.). That was the year of the tornado of May 27, 1896, when portions of St. Louis and East St. Louis were devastated (see Plates 4b, 7, 8, 9, and 10). The Wiggin's Ferry suffered a major setback, losing five ferry-boats and their wharf, as well as every building they had on Bloody Island. They bounced back the next year, though, with a good record of 62,000 round trips including 673,275 passengers, 364,000 vehicles, 51,400 animals, and 123,011 railroad cars (Kirschten 1965:236).

The end of the Wiggin's Ferry Company came about not from competition, but by absorption of the company by the Terminal Railroad Association. It began in the early 1890s with the Rock Island Railroad. The Rockford, Rock Island, and St. Louis, which originated in Rockford, had its terminus in Alton with connections to St. Louis via steam packet. Threatened with being shut out of the St. Louis market by the Terminal Railroad Association, the Rock Island sought to acquire control of the Wiggin's Ferry stock to enable an independent entrance to the city. The TRRA immediately began to compete for the stock until finally the Rock Island Railroad was admitted to the Terminal Railroad Association. To prevent any further possibility of a competitor in the transfer business, the TRRA in 1902 solicited Festus Wade of the Mercantile Company to buy the Wiggin's Company in the name of "an unknown purchaser". After completion of the transaction, the assets of the company were transferred to the Terminal Railroad Association and the Wiggin's Company became a wholly owned subsidiary of the TRRA. The Wiggin's Company continued to transfer railroad freight across the Mississippi River into the 1920s, but by 1930 all Wiggin's Ferry Company services had ceased (Baldwin pers.comm.). The Wiggin's Company functions today as a holding firm for the large tracts of riverfront property used by the Terminal Railroad Association.

#### RAILROAD EXPANSION IN THE LATE 19TH CENTURY

The second stage of railroad construction began during the Civil War and continued into the 1870s. By 1875 eleven railroads had entered East St. Louis including: (1) the Illinois and St. Louis Coal Road; (2) the Ohio and Mississippi Railroad; (3) the Terre Haute, Alton, and St. Louis (Atlantic and Mississippi); (4) the Illinoistown and Belleville Railroad (also known as the Cairo Shortline); (5) the Chicago, Alton, and St. Louis; (6) the St. Louis, Vandalia, and Terre Haute (known as the Vandalia); (7) the Toledo, Wabash, and Western; (8) the Rockford, Rock Island, and St. Louis (later absorbed by the Chicago, Burlington, and Quincy Railroad) (9) the St. Louis and Southeastern Railroad, (10) the American Bottom Lime, Marble, and Coal Railroad; and (11) the St. Louis, Alton, and Terre Haute Railroad (Bond 1969:49, 50; Cole 1922:360).

Of these railroads, eight had facilities on Bloody Island. The 1874 map of the East St. Louis waterfront by Warner and Beers depicts the extent of railroad use on Bloody Island at that time (Figure 13). At the north end of the island was the Toledo, Wabash, and Western Railroad located between Spring and Winter Streets. The T,W,& W had three large freight depot buildings and a roundhouse. South of the T,W,& W was the Ohio and Mississippi Railroad complex, which extended from Winter Street to Christy Avenue, and was separated into two parcels by the Chicago, Alton, and St. Louis Railroad yards. The north portion included extensive railyards, four



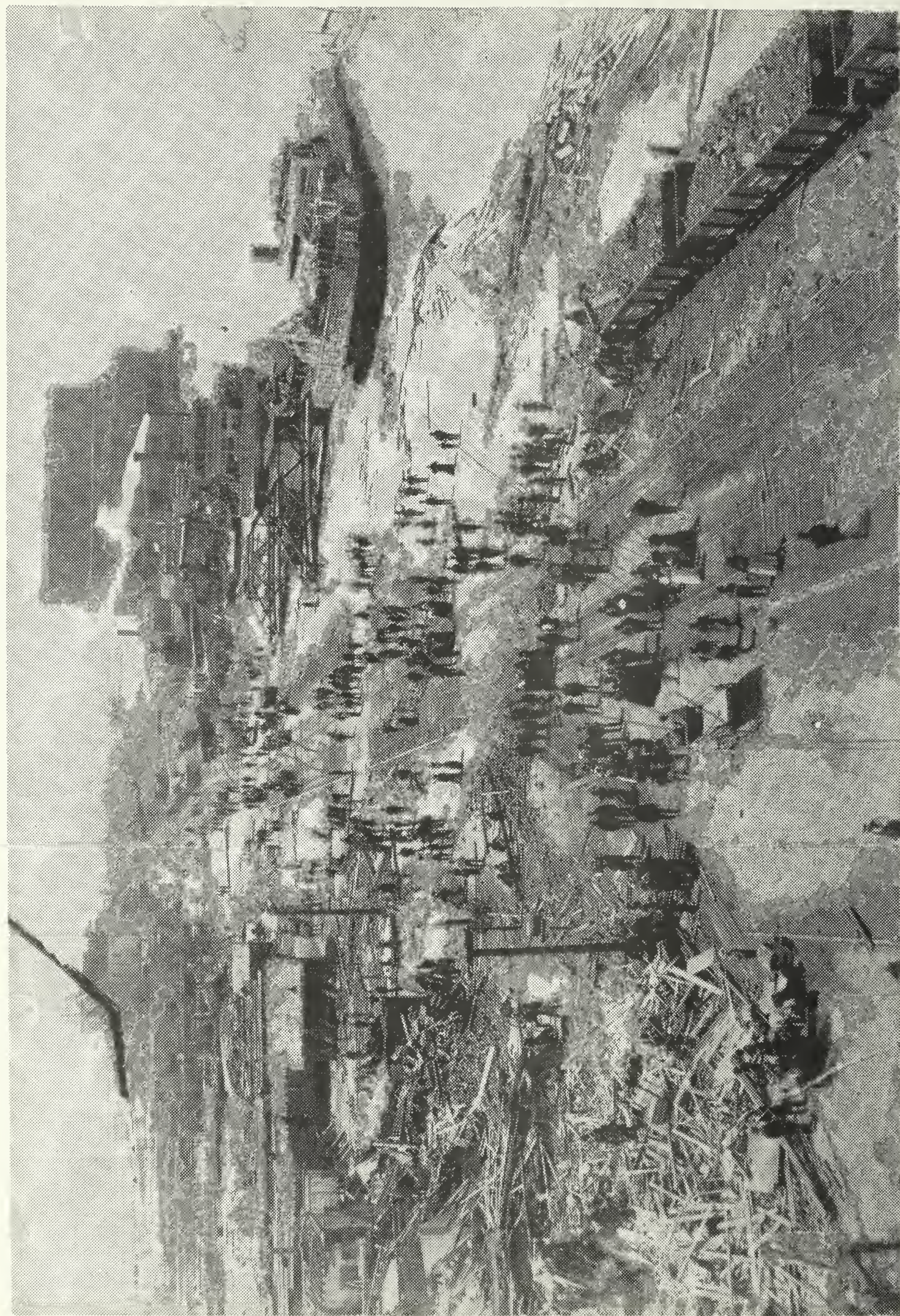


PLATE 7. Bloody Island After the Tornado of 1896. View is to the South from the Eads Bridge.  
Courtesy of the Missouri Historical Society.





PLATE 8. Eads Bridge After the Tornado of 1896. View is to the North. Courtesy of the Missouri Historical Society.



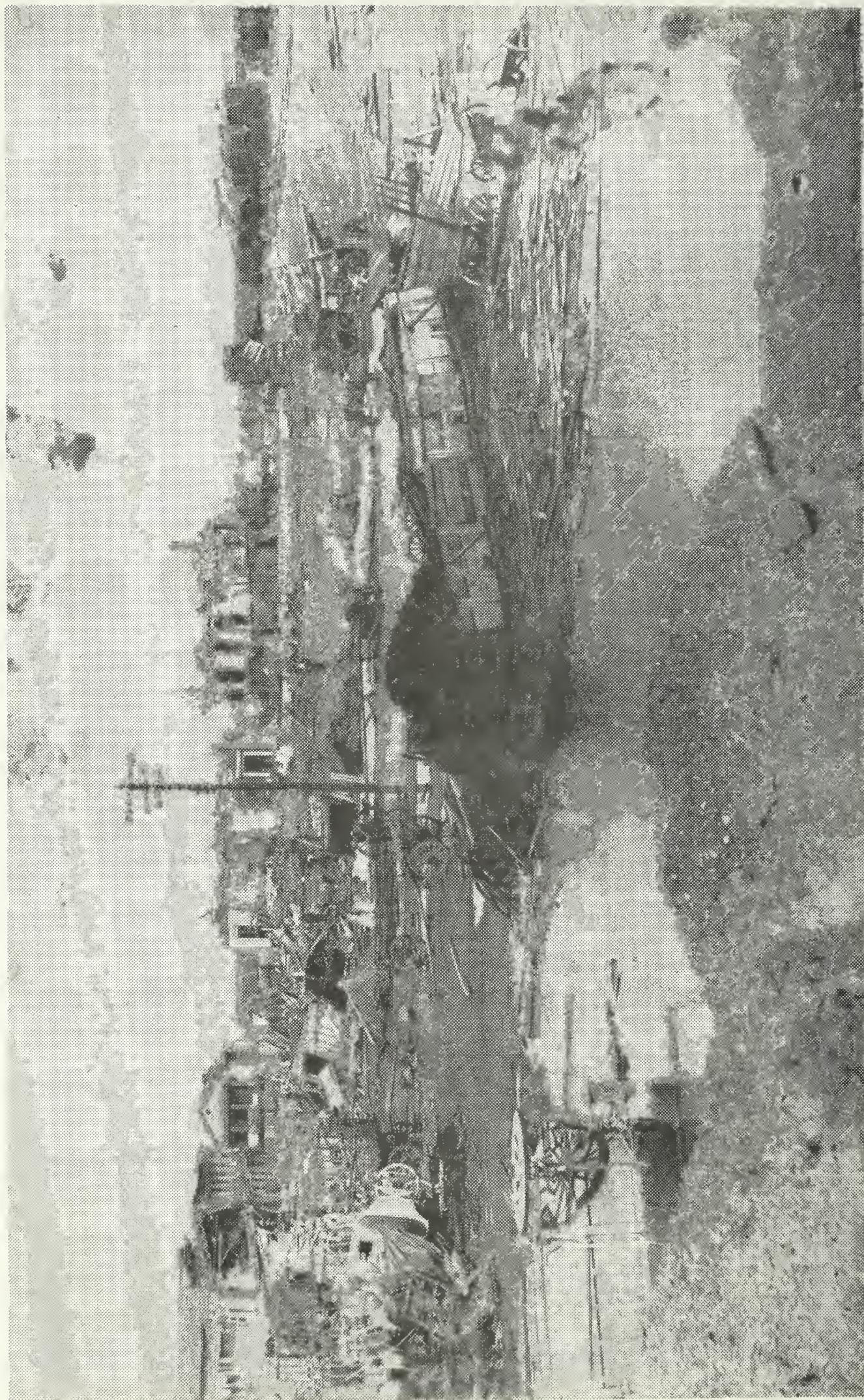


PLATE 9. The Middle Patch After the Tornado of 1896, Looking East (Note the Douglas School in the Center of the Photo and the B Street House, the Second Structure to the Left of the School). Courtesy of the Missouri Historical Society.



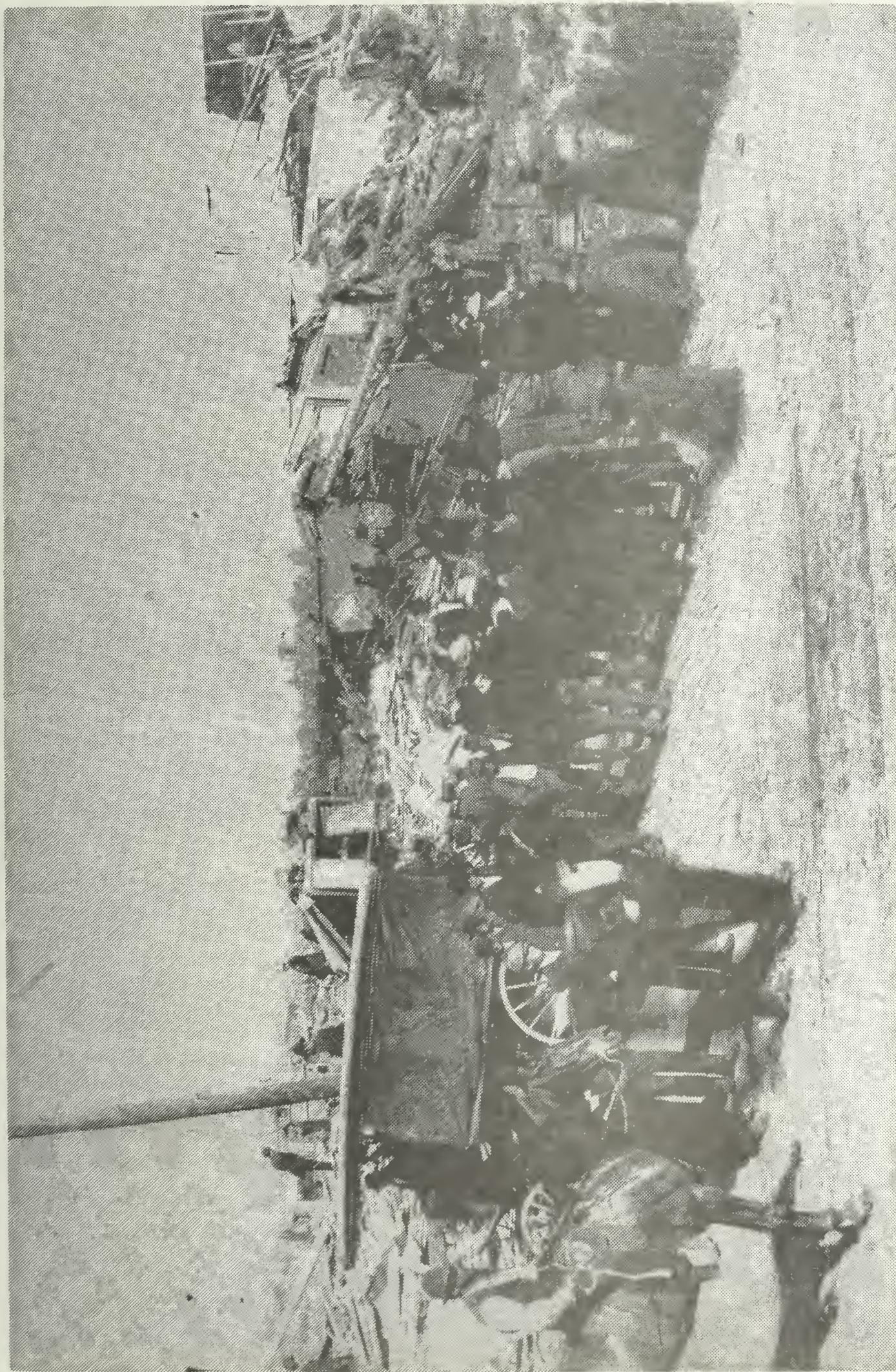


PLATE 10. The Upper Patch After the Tornado of 1896. Courtesy of the Missouri Historical Society.



freight depot buildings, and a connection to a grain elevator. The southern part included yards and four additional freight depot buildings, as well as a rail connection to a grain elevator west of Front Street. At this time, the St. Louis Transfer Company, owned by officers of the Ohio and Mississippi Railroad, was transferring freight between the railroad yards and the Wiggin's Ferry. The rail connections with other railroads and the railroad to the waterfront was part of that operation.

Between the Ohio and Mississippi railroad complexes were the Chicago, Alton, and St. Louis Railroad yards, three freight depot buildings, and a small engine roundhouse. Continuing south on Bloody Island, the next railroad was the St. Louis, Vandalia, and Terre Haute, located between Mullikin and Dyke (Broadway) Streets. This railroad had a long freight depot on the north side, a shorter freight handling facility adjacent to Dyke Street, and two smaller buildings on Front Street that may have been offices. East of the freight facilities was the Vandalia Roundhouse, located just west of Brooklyn Avenue.

South of the Illinois and St. Louis Bridge (Eads Bridge) was the property of the St. Louis and Southeastern Railroad. There were no railroad tracks or buildings here at this time. South of Bogy Street was located the St. Louis, Alton and Terre Haute Railroad, with extensive freight handling facilities including two large freighthouses abutting Front Street and other smaller structures. The engine facilities consisted of a railyard and a 360-degree roundhouse located west of Cahokia Creek and east of a remnant of the old Mississippi River channel.

South of the St. Louis, Alton, and Terre Haute Railroad was the Illinois town and Belleville Railroad, also known as the Cairo Shortline. The Cairo Shortline, constructed as a narrow gauge (three foot-wide tracks, as opposed to the standard 4 foot 8½ inch gauge), had its railyards north of Pratt Street, a small roundhouse at the corner of Church and Fourth Streets, and direct connections with the East St. Louis grain elevator, as well as access tracks to the Wiggin's Ferry landing.

Located at the southwestern edge of Illinoistown was another St. Louis, Alton, and Terre Haute Railroad complex, organized in 1862 from the defunct Terre Haute, Alton, and St. Louis segment of the Atlantic and Mississippi Railroad. The roundhouse depicted on the 1874 map was built sometime after 1863 and consisted of a 100-degree roundhouse flanked on the north by a building that was probably an engine house. This roundhouse, called the Illinoistown Roundhouse, was leased to the Indianapolis and St. Louis Railroad between 1867 and 1882, a railroad company chartered when the Terre Haute, Alton, and St. Louis was reorganized (Wilderman and Wilderman 1907:793).

Further south below the confluence of Cahokia Creek and the Mississippi River was the Illinois and St. Louis Railroad and Coal Company, which handled both freight and passengers. Extending from Belleville to Pittsburgh and Caseyville, and from there to East St. Louis and Brooklyn, the Illinois and St. Louis Railroad constituted one of the early local interurban lines for commuting between the towns of the St. Louis metro-East area. The passenger and freight depot was located south of the city limits and was serviced by the Wiggin's Ferry Company (Boylan 1938:190).





FIGURE 13. The  
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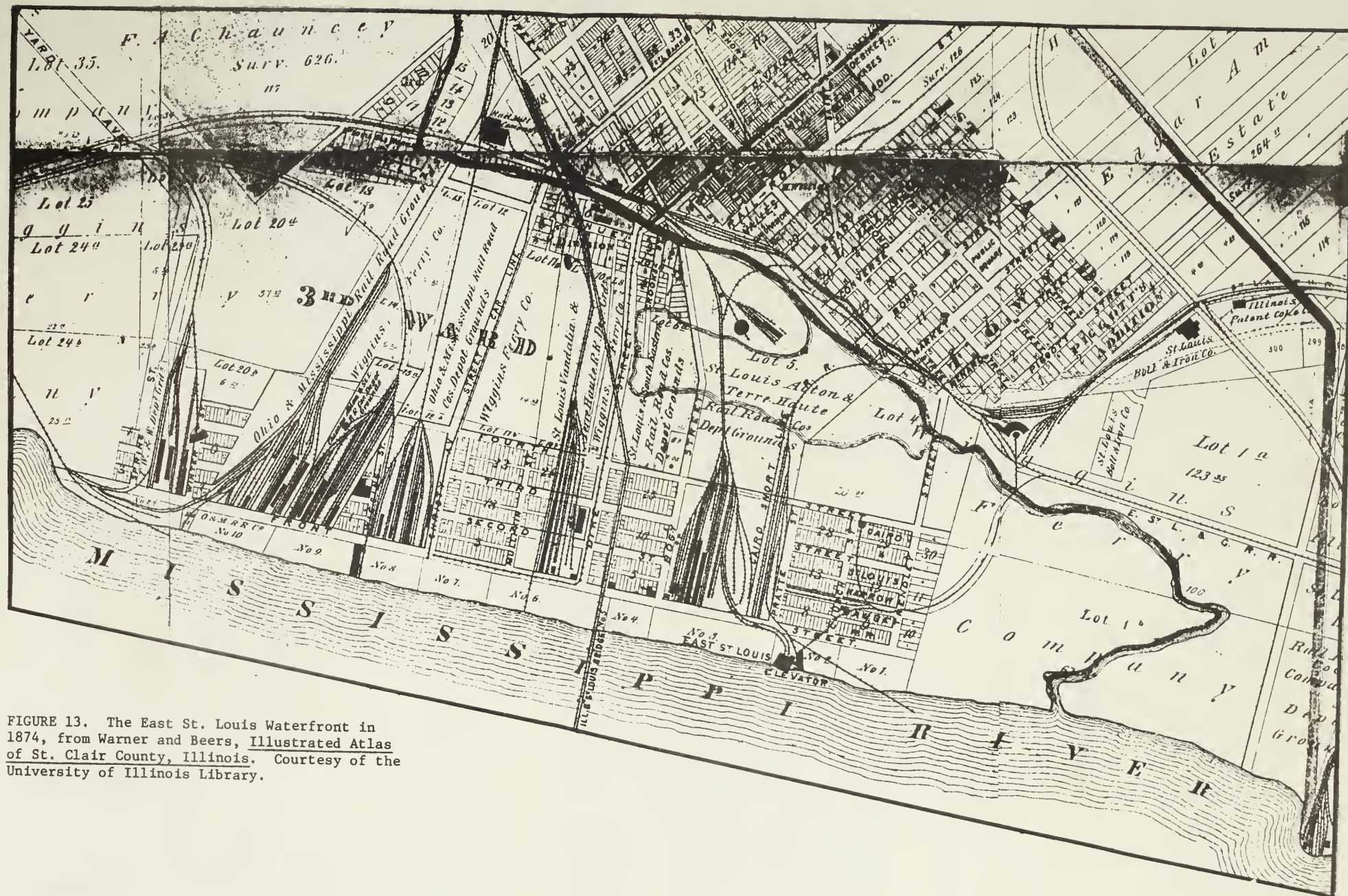


FIGURE 13. The East St. Louis Waterfront in 1874, from Warner and Beers, *Illustrated Atlas of St. Clair County, Illinois*. Courtesy of the University of Illinois Library.



When the predecessor of the Illinois and St. Louis Railroad and Coal Company was originally planned in 1837, the railroad was designed to extend directly to the riverfront via Railroad Street, a street that separated Illinoistown from the newly platted town of St. Clair. Instead, the railroad was constructed south of the town to the site of the Wiggin's Ferry landing, which at that time was operating from the mainland south of Bloody Island (Boylan 1938:189-190).

When the railroad was reorganized in the 1860s, a landing was retained south of town for the transfer of coal, and a spur was run down Railroad Avenue to the passenger depot at the junction of Railroad Avenue and the St. Clair County turnpike (Rock Road), which is known today as State Street. In order to extend the railroad to the Relay Depot and to connect with Eads Bridge to St. Louis, the officers of the Illinois and St. Louis Railroad desired to extend their railroad about three-fifths of a mile down Railroad Avenue. The city of East St. Louis, represented by Mayor John Bowman, insisted that the right-of-way had been forfeited (Boylan 1938:190).

Josephine Boylan describes the sensational political fight in 1877 between the railroad company and Mayor Bowman that raged from the courtroom to a late night confrontation on the tracks of the Illinois and St. Louis Railroad between railroad construction crews, a gang of St. Louis roughs, citizens of East St. Louis, and the mayor. Boylan quotes the contemporary newspaper accounts:

"Last night many of our citizens, when they heard of the contemplated undertaking met at the terminus of the track near the Rock Road; determined to resist any attempt by the Company to make the intended extension. This morning about four o'clock the attempt was made by the Company to lay the track; it was resisted successfully by the deputy marshals and citizens and a fence was put up immediately in front of where the Company desires to run their tracks. Should the fence be torn down and an attempt be made to put the tracks down, there will be trouble. Let every citizen who feels an interest in the matter be on hand and do his duty.

The Mayor stated that he had for some time past feared that the Illinois and St. Louis R.R. Co. would attempt to lay tracks on Railroad Street during the night, and although Mr. Branch, the president of the Company had assured him that nothing of the kind would be done, yet he placed so little confidence in the word of a man who spoke for a corporation that he had taken the precaution to place a special policeman on that street to sound the alarm should the railroad company attempt such a proceeding.

They proceeded with their work until they had put down their tracks across Main Street. At that stage of proceeding Mayor Bowman drove up in his buggy and stopped his horse on the ground over which the company desired to lay their rails. An armed crowd of roughs from St. Louis were about to force the Mayor from his position when citizens warned them to do so at their peril. The work stopped at once and a few moments afterwards, the property owners, Deputy Marshals and others tore up the ties and threw them into a pile and set fire to them. The negroes, nearly two hundred, who had been brought here by

the Railroad Company offered no resistance when informed that there was an injunction in force against the laying of the track. The iron and some of the tires were brought to the market house. During the trouble one or two knockdowns took place, but no one was seriously injured."

Boylan writes that "...it was insinuated that Mayor Bowman's opposition to the railroad arose from the fact that it had not retained him as attorney, whereas other railroads, which had done so, were granted privileges by the city" (Boylan 1938:190-191). Considering the controversy over the proposed railroad extension, it is puzzling that the Illinois and St. Louis Railroad was able to eventually succeed in laying the tracks by night shortly after the confrontation with the mayor and the people of East St. Louis. Though Boylan is silent on this question, it must be assumed that either a settlement of some kind was reached with the mayor or that the railroad simply pushed the road through after public emotions had leveled off.

#### THE HIGH GRADE POLICY

Bloody Island was described by Tyson (1875) at the completion of Eads Bridge:

"All over this Island, forming the west part of the city, the lively business aspects are very interesting...The Island has the Presbyterian Church and Douglas public school. Passing eastward the second natural feature that we see is the old eastern channel of the river. Under the eastern approach of the great bridge we see the Avenue Dyke...To the left is Bowman's Dyke crossing the old channel from the Island to the Railway Depot... Trestel works for the railroads, also cross the old channel from the Island eastward, north and south of the dykes. A third prominent dyke, which as were the others, was erected at great cost, is the Vaughan Dyke...This long strip of land lying... east of the old channel... is what remains of that fine body of timbered land half a mile wide, which in 1800, divided Cahokia Creek and the Mississippi... This strip is now probably fifty paces wide...Take a look eastward from the Island upon the old channel. Remember this as the second feature of the city site. Following the examples of older cities East St. Louis, by public and private enterprises, will build up this expanse of water between the dykes and crossings and turn it back as it was in 1800, to solid land. Then will it be platted into streets and lots, and sold at fabulous sums per foot fronting on the dykes. Stately edifices will rise like the Italian Venice from the sea, and this expanse of water that now looks so strange will form one of the most substantial parts of the place. Remember that this old channel is now to East St. Louis, as the wide moats were to the ancient cities. When the art of man shall have been brought to bear upon it, it will become all that man can wish it to be (Tyson 1875:116,117).

The sentiments of Tyson were shared by others in East St. Louis. However, the old channel of the Mississippi would be filled for the purpose of expanding the railyards and connecting the railroads to the Eads Bridge



and not for "stately edifices". The following quotations from the St. Louis Dispatch were obtained during the background research for the preliminary study conducted by Smith and Lange (1980:41). They are presented here to show the range of fill material obtained during the early period of land improvement on Bloody Island:

"This morning the teams employed by contractors Hackett and Case to fill in the space on Brook Street and Dyke Avenue with sand from the bar below the elevator quit work alleging that the price offered was too low (St. Louis Dispatch, 9 January 1874:4).

Messers Hackett and Case for filling in the low ground between Dyke Avenue under the bridge approach have this morning set fifty teams to work hauling sand from the sandbar below Cahokia Creek. They have also procured a piece of ground from Henry Neiderfield and others from Collinsville Avenue, where the graveyard mound used to be and set fifty teams hauling from there this afternoon. About two hundred teams will be put on the entire work next week, a godsend to the people with idle time (St. Louis Dispatch, 9 January 1874:4).

Sixty carloads of dirt daily are being brought through the tunnel and over the bridge, from the excavation for the Union Depot in St. Louis to be used in filling for the purpose of building side tracks for the Ohio and Mississippi, St. Louis and Southeastern, Vandalia, and Toledo and Wabash Railroads, to enable them to reach the new Relay Depot, near the East St. Louis Rail Mill (St. Louis Dispatch, 12 April 1875:4).

The graveyard mound on the property of Henry Neiderfield on Collinsville Avenue is a reference to the large mound in the East St. Louis mound group (Figure 2), a series of mounds believed to have been related to the Cahokia and St. Louis mound groups, of which only the Cahokia mound group survived the process of urban land alteration during the 19th and 20th centuries. The East St. Louis mound group was in all probability completely devastated in the 1870s. Wilderman and Wilderman (1907:763) report that from 1870 through 1871, the largest mound, a 40 foot-high earthwork, located between Collinsville Avenue, Ohio Avenue, and Fourth Street, was leveled to fill a slough and provide the base for a railroad roundhouse. Wilderman and Wilderman were unfortunately silent on the exact location of the roundhouse that received the prehistoric fill material. T.J. Canavan, reminiscing to a Globe Democrat staff writer, however, may offer a clue as to the destination of the prehistoric mound material. The reporter writes:

"This region around East St. Louis is famous for its Indian mounds, and one of Canavan's first recollections is concerned with the leveling of a mound in the then heart of the town, the earth from which was used to build Bowman's Dike (Missouri Avenue), Vaughn's Dike (Trendley Avenue) and also to fill a lake at Ninth and Ohio Streets. This was in 1870.

I have frequently wondered what Indian treasures were thrown away...in those days Indian burials, as they are called, were so numerous that the mere destruction of a single mound had no significance." (Globe Democrat, 16 April 1945).

The landfill activities in East St. Louis arose from the need to raise the ground surface to an elevation above that of the 1844 flood. The chief supporter of the "high grade" policy was Mayor John Bowman, who saw the improvement of the streets and lots of East St. Louis as an important obstacle that had to be hurdled before the city could ever hope to attract healthy commercial and residential development. The high grade policy was opposed by those who were dismayed by the high cost of the project, and the possible deleterious effects such standards would have on future commercial and industrial development that so depended on the availability of cheap land and low taxes. Bowman finally triumphed and the city council ordered all streets to be built eight feet above the city directrix (Boylan 1954:6).

The degree of filling recommended by Mayor Bowman and the city council was never accomplished, however. Initially, the streets along the waterfront were raised, including Christy Avenue (Missouri Avenue), Dyke Street (Broadway), Trendley Avenue, and Front Street. The north-south streets and the town lots on the island were not raised aside from the filling activities of railroads to expand their use of the low area between the island and the shoreline for railyards. Not until abandonment of houses and subsequent demolition and filling of old foundation remains in the vicinity of B Street and Broadway Avenue in the 20th century were many of these areas filled above the original ground surface (personal communication 1981).

There appear to have been three adaptive responses to the passing of the high grade policy that vary depending on the different elevations throughout the Bloody Island-East St. Louis vicinity. In response to the raising of the streets either:

- (1) the town lots were filled and structures were built at the new grade level,
- (2) The town lots were not filled and structures were designed for temporary use at ground level with the second story reserved for conversion to the new grade elevation, or
- (3) the town lots were not filled but the structures incorporated an accentuated foundation and basement to enable the first floor to be at or near level with the high grade.

The first response was the most common for railroads, especially in construction of railyards on the island. It is also the most commonly practised means of construction today in the area. Because of the high cost incurred and the equipment needed to bring in fill material, it was almost entirely restricted to industry. Substantial fill was used to reclaim part of Indian Lake for use as the site of the National Stockyard's National City houses. The second alternative was possibly a stopgap measure implemented prior to actual raising of the street. One such house was described in the St. Louis Dispatch in 1874:

"August Devaux intends to build a large house off Broadway and will be the first one to build in accordance with the high grade above the water mark of 1844, making the lower story of his house available for present, but as soon as the grade is raised his main story will be on level with the street" (Smith and Lange 1980:42).



In this case, the street had not yet been raised, requiring the builder to make a first floor entrance that could be used temporarily until the new grade reduced it to a basement. However, the most common adaptation to the new grade policy was simply to build the house foundation high enough to position the first floor at the new elevation. This appears to be the predominant style on Bloody Island (Bonnie's Tap, Douglas School, and houses on B Street), as well as the residential and business district of East St. Louis. Since the raising of the street elevation basically left a hole where the town lots would be, many of the sidewalks in East St. Louis are suspended between the street and the building and many lots still remain at the original elevation, which is sometimes more than ten feet below street level. Improvement of these lots continues today such that the old building foundations are obscured by recent fill.

### RAILROADS AND CAHOKIA CREEK

A discussion of the physical transformations in East St. Louis would be remiss without consideration of the effects the city improvements and railroad expansion had on Cahokia Creek, constantly the bane of railroad and street development throughout the 19th century. Cahokia Creek quite often became backed up by the many trestles and dikes crossing it, and was constantly flooding the island and acting as a feeder for the old river channel located parallel and a few yards to the west.

In the winter of 1861-1862, the confluence of Cahokia Creek and the Mississippi was diverted to the north as part of the railroad improvements of the Pittsburgh Railroad and Coal Company. The Pittsburgh Railroad intended to extend its railroad by way of a dike from its terminus on the old shoreline to the new location of the Mississippi River shoreline that had been altered by the St. Louis harbor improvements. The creek was diverted at a point west of the junction of Market and Main Streets so that it flowed further west, roughly within the old channel of the river, and emptied into the Mississippi about 1200 feet south of Trendley Avenue (Anonymous n.d.:25, cited in Smith and Lange 1980:42). This freed the area for the Pittsburgh Railroad extension as well as for construction a year later of the St. Louis, Alton, and Terre Haute Railroad Roundhouse (Illinoistown Roundhouse), located at the southwest corner of Illinoistown (Smith and Lange 1980:63).

Cahokia Creek was again displaced in the late 19th century when the rail traffic running north-south along the old Illinois shoreline east of the island necessitated the diversion of a segment of the creek between Missouri Avenue and the junction of Market and Main Streets to a location further west. The result of these many diversions of Cahokia Creek is significant in that the site of old Illinoistown, reported to have been located on both sides of the creek prior to about 1850, would have been impacted to a degree as an indirect consequence of the creek movement.

### THE EAST SIDE LEVEE AND SANITARY DISTRICT

By the beginning of the 20th century, land improvement for the protection of the city from floods was at the forefront of all local political

issues. In 1903, the city of East St. Louis again suffered from a devastating flood (Plates 11a and 11b), and the businesses and citizens of East St. Louis clamored for additional flood preventive measures. Out of this campaign came the advent of the East Side Levee and Sanitary District in 1910, delegated with the authority to plan and implement a program of drainage control consisting of levees and canals (Sexton 1910:1-6).

The plan of the East Side Levee and Sanitary District called for the diversion of Cahokia Creek through a canal with the fill being used for construction of a high levee west of Front Street. The specifications were as follows:

"...levees to be constructed of earth taken from the riverside (and the canal) leaving a berm of 40 feet in width between the toe of levee and borrow pit...wherein possible, a strip 30 feet of protection and control, and as a means of ingress and egress for repairs when needed... to insure safety for the levee (north of Front Street), arrangements are being made with the owners to fill the low ground inside the levee to an elevation equal to the height of the flood of 1903.

At present the only protection afforded (this area) are the tracks of the Chicago and Alton and Terminal Railroads, and in 1903, the breaking of these embankments caused the inundation of Granite City, Venice, Madison, Brooklyn, and National City...the construction of the levee along the shoreline is desirable in order to straighten the channel...

The project also contemplates the filling of about 200 acres of low ground to the south between Trendley Avenue and the Pittsburgh Dyke... It is quite evident from this method of filling, once successfully applied in the vicinity, will lead to the filling and raising by the property owners of the entire territory below grade west of Cahokia Creek for several miles above its present mouth, eliminating all the slough in that territory. Completely obliterating the annually trouble some creek and connecting up the scattering East side towns into one continuous city...

At the junction of Canteen Creek with Cahokia Creek near the mound, a new channel will be excavated through the ridge southerly to Prairie du Pont Creek...to complete drainage of the District... County ditch northeast of Mitchell, Long Lake, Elm Slough, Spring Lake Ditch and smaller existing drains (will be cleared, straightened, and enlarged)... additional lateral canals will be excavated where necessary to permanently drain all the low ground in the District" (Sexton 1910:14-21).

It was the goal of the East Side Levee and Sanitary District to both set up flood preventive measures and free up low-lying areas and lakes for development. During this period many features such as Indian Lake, Spring Lake, Crooked Lake, and Pittsburgh Lake were drained and over the years slowly filled, much of the East St. Louis waterfront was filled, and Cahokia Creek was connected by canal to other drainages in order to lessen the effects of flooding during peak rainfall. However, the creek would continue to cause problems throughout the 20th century due to a levee



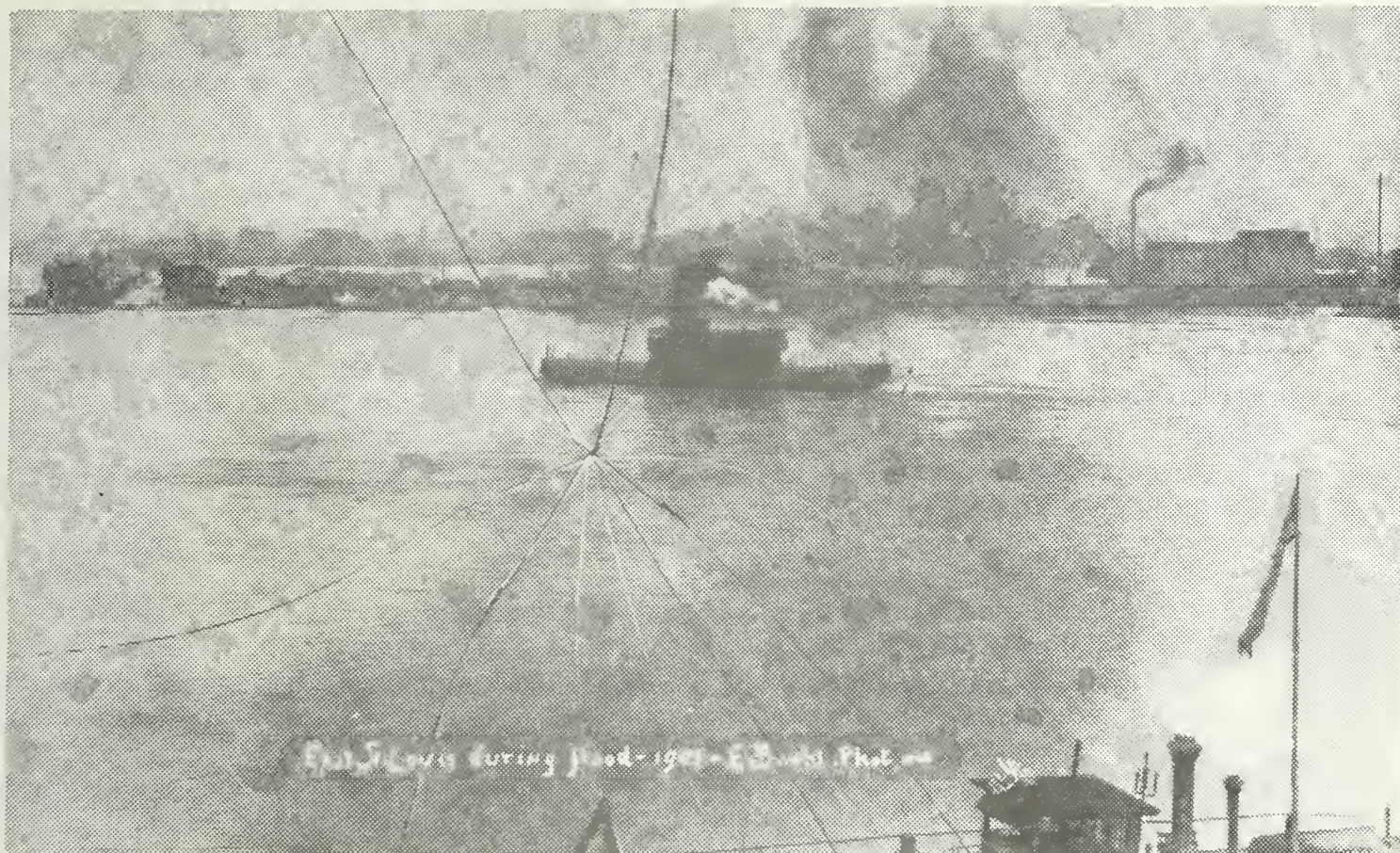


PLATE 11. A. E. Boehl Photograph of East St. Louis, with Bloody Island in the Foreground, during the Flood of 1903. View is to the East. Courtesy of the Missouri Historical Society.



PLATE 11. B. E. Boehl Photograph of East St. Louis during the Flood of 1903. View is to the Southeast. Courtesy of the Missouri Historical Society.



system oriented toward the river that did little to halt flooding originating from the back door. Eventually the creek would be pushed even further north by the expansion of the Terminal Railroad yards southwest of National City, and forced to conform to the orientation of the Norfolk and Western and Terminal Railroad tracks at the north end of the island. At present the creek maintains this position between the tracks of the Norfolk and Western Railroad. It has been cut off at National City and at the riverfront, thereby reducing it to the status of a closed slough. Remnants of the creek's many orientations are evident all along the area between the original shoreline and Bloody Island. At the south end of the island below the Poplar Street Bridge, a remnant of the creek used for disposal of railroad dining car refuse was the subject of archaeological investigations during the reconnaissance study (Smith and Lange 1980) and the present testing program.

### THE NATIONAL STOCKYARDS

The prosperous stockyard business is virtually as old as settlement in the Illinois bottoms. As early as the 1840s, two-thirds of all the cattle, agricultural, and horticultural products supplied to St. Louis came from the American Bottoms in Illinois (Wild and Thomas 1948:112). The American Bottoms supplied the livestock for St. Louis, and two loci on the east side served as collection centers for the distribution of the stock to the St. Louis butchers. These were Paps Town, located on the road to Belleville (State Street), and the settlement at Brooklyn, which was the receiving terminus for stock driven south from Alton (Wild and Thomas 1948: 112; Brink 1882:521).

The livestock business in the American Bottoms was chiefly for local consumption in the first half of the 19th century. The center for large commercial livestock packing during this time was in Cincinnati. As transportation and settlement pushed westward, the production of grain and livestock as the first big commerce for the frontier moved westward also (Taylor 1966:246). The rise of St. Louis as a leading livestock and packing area was a result of good railroad transportation to the interior prairie of Illinois provided by the Illinois Central Railroad and other railroads crisscrossing the Midwest. In addition, it became increasingly profitable after the Civil War for farmers to transport their grain to market by fattening cattle and then shipping them, rather than adding more grain to the already glutted market (Cole 1922:281-285; Bogart and Thompson 1922: 246-248).

By the late 1860s the two livestock collection centers in the American Bottoms had grown and expanded. The old Paps Town stock center was renamed New Brighton. It had extensive stockyards, but the Brooklyn livestock commerce, which had relocated to Venice in Madison County, had taken the lead along with the St. Louis-based Union Stockyards directly across the river in north St. Louis. A hotel owned by Joseph Squire served as headquarters for stockmen from above Alton who annually drove their stock to the ferry via the "Slough Road" (Brink 1882:521). The livestock centers grew with the establishment of good railroad connections. The absence of a bridge to carry the stock directly to the St. Louis stockyards assured Venice and New Brighton of a place in the livestock business as collection centers for ferry transfer across the Mississippi.



In the 1870s the need for a central livestock receiving and shipping center was growing more and more urgent with the mounting difficulties and costs involved in the antiquated system in use. The problems stemmed from the lack of direct transport of livestock from St. Louis to the railroad collection centers that were transporting livestock to the big packing centers in the East. At this time, Chicago, Cincinnati, and the north-eastern packing industries were beating out the rather scattered packing industries in St. Louis, but were encountering delays and costs involved in the shipment of livestock. The transportation of cattle, sheep, and hogs from west of the Mississippi required driving the animals from the railroad terminal to the holding pens in St. Louis, where they were loaded onto a ferry and delivered to another holding pen in Venice or New Brighton. From there, they were delivered to the various railroads for shipment east (Reynolds 1938:4).

Thus, in 1871 the prospects for a central stockyards facility were good, and soon after, the St. Louis National Stockyards was formed by a group of railroad men, livestock operators, eastern packers, and financiers. The president of the St. Louis National Stockyards was Samuel Allerton, an eastern packer and financier. The directors included many prominent men in the St. Louis area, including John B. Dutcher of the New York Central Lines and John B. Bowman, mayor of East St. Louis.

The cost of the stockyard, including the Allerton House (later called the National Hotel) and the Exchange Building, was one and a half million dollars. The stockyards officially opened in November 1873. Though the National Stockyards does not actually buy or sell stock, it operates as a huge machine for the transfer and holding of stock, and controls the East St. Louis Junction Railroad, 5000 stockyard pens, warehouses, a hotel, restaurant, inn, and fertilizer plant (Reynolds 1938:5).

By the end of the 19th century the St. Louis National Stockyards had attracted a number of packing interests from the East. Since only a sixth of the stockyard property was taken up by the pens and buildings, the National Stockyards sold off much of their real estate to large packing firms like Swift, Armour, Hunters, and Circle, as well as seed and feed businesses, hardware and farm machinery, lumber, fertilizer, tanning, and rendering plants (East St. Louis City Map and Directory 1936, 1956).

In 1907, the St. Louis National Stockyards and allied commercial interests were incorporated as National City. The city included all of the stockyards property, consisting of the National Stockyards proper as well as the cortege of packing companies and livestock-related businesses clustered around the stockyards. In order to maintain the necessary population of residency, National City established a small town that consisted of forty houses arranged in four rows on two streets, and included a combination church/school and a combination fire/police station and store. Though local legend states that the houses were pre-fabricated model company houses at the 1904 St. Louis Exposition (personal communication 1981), Bateman & Selby (1907) records that on January 23, 1907, eight months before incorporation, the National City let a contract for the construction of 40 two-story buildings at a cost of \$3000.00 each (Bateman & Selby 1907:752-772). At present, neither of the two explanations for the origin of the National City houses can be fully substantiated (see Chapter VI).

## INDUSTRIALIZATION, SOCIAL CHANGE AND CONFLICT

The expansion and prosperity enjoyed in the period following the Civil War was followed by the economic collapse of the Panic of 1873, brought on by rapid industrial expansion and inflated credit. The enormous railroad expansion after the war, as well as other manufacturing growth and land speculation, was part of a great tide of business investment and uncontrolled optimism. Though profits were large, prices were inflated. The United States sold bonds and other securities abroad to fund this expansion while increasing imports beyond the balance of exports, necessitating the loss of specie abroad to pay the foreign debt and trade deficit (Bogart and Thompson 1922:274-287). The suspension of investment firms and bankruptcies began in the east. Between 1873 and 1877, commerce fell off and unemployment rose (Burbank 1966:5).

The transportation system was hit hard. By 1877 only one in fifteen railroad lines tributary to St. Louis was paying dividends. The railroads passed their losses down to the employees by cutting wages, forcing them to perform unpaid labor, eliminating jobs, and cutting back on hours. When employees fell so far into debt that their wages were garnished, they were discharged. Although this treatment precipitated a number of isolated strikes in the 1870s, the employers made use of the Pinkerton and other detective agencies to infiltrate and crush the strike. However, the discontent of the railroad employees was fed by the attitudes of wealthy railroad capitalists who were bluntly unsympathetic to the complaints, and reacted to the strikes by imploring for armed military protection of railroad property by the federal government (Burbank 1966:5-10).

The great strike that paralyzed much of the nation began in the east at Martinsburg, West Virginia; Baltimore; and Pittsburgh. Before long, it had spread to Chicago, St. Louis, and Kansas City. While the strikes in the east were accompanied by violence and destruction, the St. Louis strike startled many by the quickness and efficiency of its non-violent takeover, and the general ease with which the strike spread and clamped down with a blockade on transportation and commerce.

On Sunday, July 22, 1877, workingman representatives of virtually all the railroad lines met in East St. Louis, elected an executive committee to direct the strike, and issued General Order No. 1, which stopped all railroad traffic except passenger and mail trains. The strikers made the relay depot the base of operations. The strikers also controlled the bridge approaches and telegraph lines, and soon made the Union Depot in St. Louis the center of the Missouri railroad strike. The mayor of East St. Louis, John Bowman, was appointed arbitrator for the executive committee. Bowman also helped the committee select a special police to guard the railroad property against damage. Although the strikes in East St. Louis were offered encouragement by the German-American Workingman's Party and the secret Order of the Knights of Labor, who were very instrumental in the organization of the Missouri general strike, the East St. Louis strike was not run by any organized labor group (Burbank 1966: 16-33). This was perhaps the most ominous sign of all since a grassroots movement for redress of grievances threatened the very core of the capitalist-labor relations, which up till then had been threatened only by a few socialist organizations and unions of skilled labor.



The railroad strike soon spread to other business sectors. In East St. Louis, the packing houses around the National Stockyards were closed without difficulty. At one plant, 125 head of cattle were allowed to be processed under the condition that the company donate 500 cans of beef to the strikers, to which the packing plant was quick to agree. At the bluff coal mines near Belleville, factions of coal miners began organizing with intentions of joining the general strike. In St. Louis, representatives of different shops and plants began to appear at the Workingman's Party headquarters with requests to join the other strikers; and Carondelet with its heavy industries also soon joined the strike (Burbank 1966:21, 33-43).

The discipline and non-violence of the East St. Louis strike was in contrast to the nominal control prevailing on the other side of the river. Though the strikers in St. Louis did not resort to the kind of destruction that occurred in the eastern United States, isolated incidences of lootings, fights, and destruction, as well as the addition of blacks to the striking force, provided ammunition for the pro-railroad St. Louis newspapers. The St. Louis Republican remarked that the procession of strikers "in not exactly what it did, but in what it barely refrained from doing, was an event simply terrifying in the eyes of all who behold...that vast, impetuous and perspiring mass of men...if a provocation of the most trivial character were offered" (Burbank 1966:74, 75). Harry Eastman, representing the East St. Louis workers, addressed the St. Louis strikers and urged the men not to interfere in East St. Louis: "Go home to your different wards and organize your different unions, but don't keep coming up here in great bodies and stirring up excitement. Ask the Mayor, as we did, to close up all the saloons... keep sober and orderly, and when you are organized, apply to the United Workingmen for orders. Don't plunder...don't interfere with the railroads here...let us attend to that" (Burbank 1966:74).

Finally, on July 27, the St. Louis strike was put down by a contingent of police with Missouri militia in reserve and no resistance from the strikers. The next day United States troops advanced on East St. Louis and took over the relay depot without incident. The intervention by federal troops, rather than police or state militia, was an acknowledgement of the ineffectiveness of the militia in such a widespread strike, as well as a commitment by the government to protect railroad property a great deal of which was in federal receivership. Though no effort was made by the strikers to recapture the relay depot, they openly defied Governor Cullom of Illinois when he ordered the resumption of business and gave orders for a train to move. The strikers "sitting about on the curbs, looking entirely harmless... to a number of five or six hundred, gently closed in upon the train, and put out the fire in the engine." Governor Cullom then made a forceful speech to the effect that it and all trains would go out "if there was enough power in the State of Illinois to send them." However, the engineer refused to take the train out unless the governor occupied the cab with him, an invitation that was declined, and so the blockade continued into the next day (Burbank 1966:157, 158).

That evening, General Pope informed President Hayes that the train blockade continued and would require more force than Governor Cullom had anticipated. The next day arrests were made by the United States marshal. The strike-sympathetic East St. Louis Gazette in an editorial placed the blame of the strike on the railroad bond holders and directors "who cut

freight and passenger rates and then reduced wages in order that dividends might be maintained...laborers might voice their objections singly, and merely get fired; but when three or more voice their objections, they are called a mob, and the strong arm of the law is invoked" (Burbank 1966: 158-159).

So untenable was the control of East St. Louis that General Bates, commander of the Illinois militia, maintained a headquarters in a Pullman car in the East St. Louis railyards. A hardliner, General Bates expressed the opinion that "a strong standing army, with the quartering of several regiments in the principal cities was now a necessity." The president of the St. Louis Merchants Exchange said that "a standing army would give employment to and keep out of mischief a dangerous portion of the community, a class which was growing larger, and would always be a weight on the community (Burbank 1966:187, 179).

A few days later a letter that was published in a St. Louis newspaper and signed by 27 prominent citizens expressed a different attitude. The letter stated that, based on the results of an investigation, the strikers had genuine grievances in that the railroads had failed to pay regularly and promptly their employees. The letter stated: "We are informed, that in some instances this class of employees, to whom cash payment is a necessity, have not been paid in full for months; that in one instance the pay for several months is entirely in arrears, and that a portion of what is due in money has been paid in certificates on which they suffer a ruinous discount." The railroads remained silent on the charges and there was no improvement in the condition of the railroad workers (Burbank 1966:179).

The East St. Louis strikers were dealt with leniently compared to the St. Louis strike leaders. Burbank notes that "in spite of their anger, the railroad officials, or most of them, must have realized that East St. Louis would remain in the hands of the railroad workers. Mayor Bowman demonstrated his loyalty by defending the East St. Louis strikers on trial in Springfield and two months later was on hand to deliver a speech to the Workingman's Union of East St. Louis" (1966:177).

The full impact of the 1877 strikes on a national as well as a local economic and social level have not been fully explored and have been largely ignored by past and present historians of the St. Louis-East St. Louis area. The overall reaction in the 1870s was one of "horror and indignation" and, with few exceptions, the business leaders, most particularly the railroad industry, did little to examine the causes of the strike or examine the grievances submitted by the executive committees. The press more and more advised working people to accept the low station in life that had been given to them. The Reverend Henry Beecher, before a wealthy Brooklyn, New York, congregation, asked: "Is the working class oppressed? Yes, undoubtedly it is. Nevertheless, God had intended the great to be great and the little to be little" (Burbank 1966:11, 187).

Although the Great Strike of 1877 failed, the strike had far-reaching consequences for the labor movement. Out of the strikes of 1877, the Workingman's Party and the Order of the Knights of Labor gained a large membership and a new labor organization was born in 1881, the American



Federation of Labor. The AFL was generally apolitical, being mainly concerned with achieving economic equity. It was the Greenback Labor Party, "with a program of currency reform and moderate demands on labor," that became the chief political mouthpiece for the labor class. The socialist movement as a whole went through some changes and divisions, with the hard-core, political faction splitting off and leaving a moderate, apolitical, civil rights- and union-oriented labor organization, the Socialist Labor Party, to carry the torch for the working class. The complaints of the working people were economic, not ideological, and so action-oriented labor organizations, only moderately socialist, were able to garnish the most support. The moderate socialist movement remained active in St. Louis, placing members on the school board, the municipal House of Delegates, in the State Commissioner's seat, and in 1911, 1913, and 1917, a socialist mayor was elected in Granite City, Illinois, an industrial community north of East St. Louis.

Some very revolutionary reforms came out of the socialist movement in the St. Louis area. The school board pushed for a kindergarten system and foreign language instruction in schools. A publication in 1878 called Tour of St. Louis made known the appalling details of slum life in the city. In 1879 the State Bureau of Labor Statistics was set up in Missouri to monitor the labor situation, and in 1884 the Federal Bureau of Labor, forerunner to the United States Department of Labor, was established to assure just treatment of the working class (Burbank 1966:190-193).

However, the reforms taking place slowly throughout St. Louis and the country were apparently not enough to stem the growing dissatisfaction of the East St. Louis workers. In April of 1886 East St. Louis was again torn by a series of riots aimed at the railroads. On Friday, April 9, a crowd of strike sympathizers congregated on a bridge over Cahokia Creek and began jeering at a force of special deputies brought in to protect nonstrikers who had continued to work. The demonstration turned into a riot and the deputies, stationed on the Louisville and Nashville trestle over the old river channel, fired on the crowd, killing seven people.

The rioters burned the lumber shed, oil rooms, and scales of the Cairo Shortline, and tried to set fire to the roundhouse. Railroad cars were torched, a trestle was burned, and the Louisville and Nashville freight-house was destroyed. Five hundred state militia were ordered into town and the railroad lines fortified their buildings. The militia remained encamped between the Ohio and Mississippi and Vandalia Railroads until the trouble was over (Harpers Weekly 1886:248-51; St. Louis Post Dispatch 1886:4, cited in Smith and Lange 1980:50).

The problems with the railroad/employee relations would continue in East St. Louis. However, it would take on less importance in the overall social and economic sphere of the town in the last decade of the 19th century when East St. Louis went through its second industrial expansion.

#### THE GOLDEN ERA

The period between 1890 and 1920 in East St. Louis has been designated as the "Golden Era" for manufacturing by Robert Harper in his study Metro East: Heavy Industry in the St. Louis Metropolitan Area (Koepke 1974:47).

This was the period in the history of East St. Louis when most of the industrial base was established and when population and employment growth was equal to that of St. Louis. During this time, employment in East St. Louis grew by 20,972 while the increase in St. Louis was 25,247 (Koepeke 1974:48). For the entire period between 1870 and 1910, the population of East St. Louis doubled every decade: from 5,644 in 1870 to 9,185 in 1880, 15,169 in 1890, 29,655 in 1900, and 58,547 people in 1910 (Miscellaneous documents file 1915).

The beginning of this modern industrialization had its roots in the decade of the Civil War. During this period there was suddenly an increased demand for commodities in the home market accompanied by heavy war tariffs on imported goods, thereby giving the advantage to the domestic producers. The development of the West at this time, the migration and immigration augmenting the growing population, the increasing production of grain and cattle, railroad expansion, and the overall improvement of the material conditions and purchasing power of the population created a vast domestic market for manufactured goods (Bogart and Thompson 1922:382).

However, in the American Bottoms of Illinois, it was the extractive industry based on the utilization of natural resources that was the catalyst for growth of the towns opposite St. Louis. The beginning of the industrial base of East St. Louis was brought about by the concentration of railroads with their attendant engine houses, foundrys, blacksmith shops, and roundhouses. By the mid-1870s railroad-related industries and iron factories began locating in East St. Louis to be close to the buyers of their products, transportation, and to gain the advantages of being closer to the source of coal. In 1874 Elliott's Frog and Switchworks was established along Main Street between Market and Converse (Bateman & Selby 1907:752-772). Soon after, the St. Louis Bolt and Iron Company relocated to the east side, setting up shop along the old bed of Cahokia Creek just south of old Illinoistown near the Illinois Patent Coke Company. The location provided all three companies easy access to the Illinois and St. Louis Coal Railroad. In 1875, the Missouri Car and Foundry Company leased the abandoned yards of the Ohio and Mississippi Railroad, also to be nearer to the sources of coal (Reavis 1876:84). It was the advantages of cheap land and access to coal that kept the railroads from moving to St. Louis after the construction of Eads Bridge, and with the relocation of other heavy industries to the east side, the trend began that would skyrocket East St. Louis into the industrial age.

Yeakle's (1890) monthly progress report for the city lists the manufacturers established in East St. Louis. The list indicates that industry at this time was oriented toward iron manufacturers, agriculture, and city improvements. By 1890 manufacturing in East St. Louis reflected the domination of iron industries including a railway iron mill, a railway frog and switch shop, two wire mills, one metal mill, one nut and bolt mill, and one nail mill. The National Stockyards, now 17 years old, was probably the largest employer on the east side, and by 1890 three packing houses (Armour, Scott, and Morris) had also been established. Prior to the 1890s, the many railroads that terminated at East St. Louis had been bringing in grain from midwestern farms for reshipment, but by 1890 three flouring mills were well established as a sign of the new emphasis on agricultural



manufacturing. Other industries at this time were two oilworks, three lumber yards and planing mills, and local industries including two electric light plants, one gas works, and one waterworks (Yeakle 1890:5).

Even on the eve of this phenomenal expansion and growth, the change was apparent. Yeakle described the new activity on the east side:

"Leaving the bustle of St. Louis and crossing the Great Bridge by the electric railway (Eads Bridge), we were landed within six minutes at Broadway, East St. Louis, and there too found great activity! Only a year since we would have met very few persons on the streets of the east side, but now, how changed in a single short twelve months!

This fresh activity has been promoted in part by the funding of the moderate debt of this young municipality, and the easy raising of adequate revenue for interest, and the general public improvements... Viaduct Bridge, of stone and steel across Cahokia Creek is approaching completion, and the reconstruction of Broadway to the high ground eastward is in active progress. The paving is of granite blocks... not a single dwelling is known to be vacant. . .that the 3000 workmen and employees of the factories, shops, warehouses, and of the 17 railways which terminate near the end of the Great Bridge, East St. Louis are compelled to return each evening to St. Louis to find lodging in rented dwellings and boarding houses, and that were boarding houses to be rented in East St. Louis, the most of these 3000 men would reside altogether there, bring their families and swell that number of residents to double or treble. . . The process of full residence by the army of employees in East St. Louis is going on rapidly as new houses are constructed for their accommodation" (1890:1-2).

Yeakle goes on to discuss the conditions and improvements that gave impetus to the growth of manufacturing:

". . .a constantly swelling volume of freight and passenger traffic will soon give employment to the new Railway Bridge (Merchants Bridge) which will be opened for use at an early date between the two sides of the river. But the cheaper ground and fuel on the east side will continue to draw more and more manufacturing establishments which will locate and establish in East St. Louis. They will be enabled to secure an especially cheap rate of through transportation for their production. . .to all points. . . Vacant and improved property continues to be held at the most reasonable prices in East St. Louis, prices which are out of due proportion to the value of less favorable sites for manufacturing and general business purposes on the St. Louis side of the river" (Yeakle 1890:3-5).

Lewis Thomas gives some idea of what this difference in comparative land prices between St. Louis and the east side amounted to, even as late as 1927. Thomas reports that real estate in the industrial Mill Creek valley area of central St. Louis could be bought for one to five dollars per square foot, whereas in the metro-East area, the price ranged from five to thirty-five cents per square foot. The advantage to be realized on the east side in terms of better access to the coal deposits in the bluff area

was also a strong asset. Robert Harper notes that in 1913 the cost of delivering one ton of coal to St. Louis was 52 cents compared to 32 cents for East St. Louis, the difference being that dictated by the Illinois Public Service Commission as opposed to the Interstate Commerce Commission, which had the rate-making authority for transportation between states (Koepke 1974:48).

The rapid growth of industry was taking place all over the Northeast, Great Lakes, and Midwest where the extensive system of railroads, water transportation, and access to coal, as well as a large labor population, provided the foundation for the emergence in this area of the American Manufacturing Belt. By 1910 the American Manufacturing Belt included 34 of the 50 cities with more than 100,000 people, and 14 of the 19 cities with more than a population of 250,000. Many of these emerging manufacturing cities had been major metropolises prior to 1870, and like St. Louis, helped to pull manufacturing into the medium-sized towns in their periphery (Ward 1971:39-41).

The evolution of a transportation center like East St. Louis into a commercial center was inevitable. As a general rule, when the availability of raw materials reaches a specific threshold level where finished goods shipment represents a cost savings, the location's potential for the establishment of manufacturing increases (Southwest Illinois Metropolitan and Regional Planning Commission 1976:11). However, the advantages in the American Bottoms in terms of land prices and proximity to coal drew some industries from St. Louis that might otherwise have not developed on the east side until much later. Of the medium-sized towns around St. Louis, the Illinois towns in the American Bottoms provided location for expansion of industry, much of it based or originating from the larger city across the river.

East St. Louis had acquired much of its industrial base by the first decade of the 20th century. By 1906 Franke reports on an extensive development in manufacturing including car trucks, car springs, steel cars, stoves, locomotives, spikes, nails, two machinery forges, a stamp mill forge, enamelled ironware, machinist tools, two rolling mills, frogs and switches, glassworks, aluminum, glucose, cottonseed oil, barrels, car roofs, fireworks, fertilizer, seven factories for structural iron, two breweries, white lead, yeast cakes, paint, two chemical plants, two baking powder factories, breakfast food, silica and the stockyard and packing plant industries (Franke 1906).

The rapid expansion of industry in East St. Louis was aided by a concerted program of tax breaks, water and utility discounts, and a system whereby city improvements were borne by the non-corporate sector of East St. Louis. Franke (1906) reports that the city had an excellent sewer and filtration system, a good health department, well-paved streets, gas and electric light systems, and in addition "the tax rate is low, and manufacturers locating at this point are exempted from city taxes and teaming license for a term of years commensurate with the magnitude of the enterprise." In demonstrating the advantages over St. Louis, Franke noted that East St. Louis had "cheaper locations, lower taxation, cheaper water, prompt shipping facilities, cheaper coal, and the ability to land their goods in the heart of St. Louis quicker than could be done from most of the factories in that city" (Franke 1906).



North of East St. Louis, Venice, with its ferry operation, was a recipient of the commercial prosperity brought about by its strategic location south of the terminus of the Chicago and Alton Railroad at Alton. Venice served as a collection point for transfer of passengers, freight, and livestock driven south from Alton. At the same time East St. Louis was expanding commercially, Venice was also experiencing a growth of manufacturers. Throughout the late 19th century, Venice established grain elevators, stockyards, a slaughter house, blacksmith shops, ice houses, cigar factories, a glucose works, a canning factory, glassworks, and other smaller local industries (Fechte n.d.:1-7). The completion of the Merchants Bridge near Venice in 1890 to alleviate the railroad traffic congestion on Eads Bridge helped make further railroad and commercial growth in the area north of East St. Louis feasible. This growth of industry took place by means of a planned company town created with the purpose of providing a pool of labor and a governmental system sympathetic toward the support and advancement of a particular sector of industry.

In the last decade of the 19th century, this growth occurred north of Venice along the tracks of the Chicago and Alton, Big Four, Wabash, and Burlington Railroads. In 1895, two brothers, F.G. Niedringhaus and W.F. Niedringhaus, two of the largest industrial employers in St. Louis, laid out the town of Granite City and erected the National Enameling and Stamping Company and the Granite City Steel Works, which employed together over 3000 men. The Niedringhaus brothers were also instrumental in bringing in large steel casting plants of the American Steel Foundry Company and Commonwealth Steel Company. By 1907 this company town had grown to a population of 12,000, and a large commercial and industrial complex based on this heavy industry had become established drawing for labor on the growing population in Granite City, Madison, and Venice (Bateman and Selby 1907:3,4).

This move to the establishment of planned sovereign company towns was partly a reaction against the deplorable living conditions existing for laborers after the Civil War and was a concerted effort by business to plan and construct a community that would improve and develop middle class values in its workers and citizens (Buder 1970:248). In another sense, the planned town was a means to afford industry the kind of paternal control in the business of government and taxes to enable the city leaders never to lose sight of the collective goal of the continued prosperity of industry that was the lifeblood of the town.

The trend that had been started by the National Stockyards and Granite City was soon followed by incorporation of Sauget by the Monsanto Chemical Company in 1926, and Alorton by the Aluminum Ore Company in 1932. Though perhaps Granite City fully intended to incorporate and provide housing for all of the laborers working in the industries, the other company towns had incorporated predominantly a small area that included only the business interests and company housing. The company housing, in many cases, numbered only enough residents to qualify as a town under their charter and constituted a small fraction of the total working population. The influx of thousands of immigrant laborers from the rural areas in the region, from the south, and from Europe, and the continued growth of industry meant that thousands of workers were living outside of the industrial enclaves and burdening the fiscally poor and overcrowded city of East St. Louis. While

East St. Louis was deprived of a feasible tax base by the incorporation of many of the commercial enterprises, it was saddled with the task of policing, governing, and providing for a large multi-ethnic unskilled, and often unemployed, transient population.

Where were the newcomers to the east side coming from? Thousands were drifting off the farms toward the manufacturing belt in the Northeast and Midwest. Though the number of farms had grown and agricultural productivity was high, there was a surplus of farm products that drove down prices. The flight of the farmers served both to increase the relative size of these large urban areas, as well as boost the size of the secondary cities, the rural collection centers (Chudacoff 1981:101-103).

One of the most significant population movements during this period was the migration of blacks from the rural south to the American Manufacturing Belt. As of 1890, more than 90 percent of blacks lived in the rural south. However, by 1900, there were 32 cities with more than 10,000 black inhabitants, and 70 percent of all blacks in the North and Midwest were living in urban areas (Chudacoff 1981:110,111). In East St. Louis the number of blacks increased from 5,882 in 1910 to over 10,000 by 1917 (Rudwick 1964:165), representing roughly 15 to 20 percent of the total city population in that period.

An even more significant immigration movement was stemming from Europe. This second wave of foreign immigration began in the 1880s, peaked in the first decade of the 20th century, and declined after 1920. Unlike the first wave (1840-1880), which consisted of English, Irish, Germans, and Scandinavians, the second wave drew immigrants from eastern Europe including Italy, Russia, Greece, Syria, and other portions of North America, including Canada and Mexico (Chudacoff 1981:103-107).

Like the first immigration in the mid-19th century, the eastern European immigrants were unskilled, but unlike the first newcomers, these new immigrants came over at the peak of urbanization and industrialization and so were drawn to the low paying, unskilled jobs in the cities of the American Manufacturing Belt. By 1920, 48 percent of the country's urban population was foreign born with fully three-quarters of the immigrants living in the cities. Though a much higher proportion of the recent immigrants remained in the port cities of the Northeast where low paying manual labor was in demand and sources of employment were close at hand, the railroads shuttled labor from the eastern port cities to the manufacturing areas growing in the Midwest. In fact, railroads were often commissioned by the factory owners to run "specials" between the areas to siphon off the labor filling up the ghettos in the Northeast (Chudacoff 1981:109-111; Ward 1971:71-81).

#### EXPANSION AND DIFFERENTIATION OF THE CITY

Throughout the country the rapid industrialization and population growth was transforming the internal spatial arrangements of people and commercial activities from the early mosaic arrangement of industry, manufacturing, retailing, and residential uses to a more differentiated distribution of activities. The new spatial ordering of land use was determined



by the rising competition for central locations, and improvement of rail transportation and interurban commuter lines, which opened up areas on the periphery for industrial use and residential expansion (Ward 1971:85-90).

However, because industrial and population growth followed after the railroads had become established in East St. Louis, there was perhaps less rearranging of land uses than might have occurred in other cities. Instead there was a general expansion of heavy industry along the direction of the railroads north, south, and east of the city, with manufacturing and residential expansion filling the high area along the confines of the East St. Louis Rise, a Y-shaped alluvial fan affording a relatively well-drained land use area in the American Bottoms. Bloody Island, which had always been primarily a freight collection center and transfer facility and only secondarily a residential location, experienced even more dislocation of residents and expansion of railroad use. This transformation was probably aided by the severe floods and two devastating tornadoes in 1871 and 1896, which made it more economically feasible for private residents to sell out to the railroads and relocate to more desirable areas.

The dozen or so blocks along Missouri and Broadway Avenues just east of Bloody Island became important as early as the Civil War as the location of the local government complex, passenger depots, and hotels. By the turn of the century it could be called a true central business district with a large retail center, banks, hospitals, hotels, moviehouses, etc.

The original settlement of Illinoistown had undergone some vast changes from the time it was the major settlement on the east side of the river before the mid-19th century. Relegated to a housing and manufacturing support area by the growing domination of East St. Louis and Bloody Island in the late 19th century, it became further isolated from the heart of the city by the construction of railroad tracks on all four sides of this 25-block area. It was also isolated by railroad and industrial activity and squatter occupancy in the "no-mans land" that was St. John's disputed town of St. Clair. For the rest of the century up to the present, the site of Illinoistown served as a residential area with single, multi-family, and tenant housing facilities, and accompanying local stores, churches, and schools occupying this location.

The old town of St. Clair, founded by John St. John in 1837, had been the cause of much dispute since 1846 when St. John died, leaving no heirs. Though the Illinois and St. Louis Coal Railroad had been able to claim an easement through this section, the true ownership was uncertain and while the property was tied up in litigation, squatters took over the property. By the turn of the century, this area, consisting of perhaps twelve blocks, was part of the "red light" district of East St. Louis, with brothels and taverns intermixed with black-occupied shanties. As such, it marked the boundary of the proverbial "other side of the tracks" and faced the central business district of East St. Louis. Everything southeast of Broadway Avenue, including Illinoistown, was the black-occupied ghetto of East St. Louis (Rudwick 1964:7-17).

An examination of the 1935 East St. Louis city map depicts this delineation of the ghetto, based on the location of black churches and schools that were segregated and so designated on city maps and directories, as

were other ethnic schools and churches. The black ghetto, or black belt as it was called, was the southern section of the city south and east of Main and Broadway. This section of the city was so identified with blacks that the Free Bridge (MacArthur Bridge) to the south of the city was often called "the Black Bridge" (Fechte n.d.).

Additional information is available concerning the extent of black settlement from the records and studies of the 1917 race riot in East St. Louis. While most of the references to black settlement concern the black belt mentioned above, newspaper accounts of violence and property damage indicate that a black enclave existed just southeast of the National Stockyards and along Third and Fourth Streets between Broadway and Missouri Avenues (East St. Louis race riot papers). The Sanborn Insurance maps of 1910 also indicate black settlement west of Cahokia Creek between Broadway and Missouri Avenues (the Leap Year site).

The rest of the city appears to have been mixed native white and foreign immigrant, with churches, schools, and clubs identified with Jewish, Polish, Hungarian, Greek, Scottish, Yugoslavian, German, and Irish ethnic groups. Undoubtedly there were small enclaves of many of these foreign groups, though it would be necessary to delve deeper into the records to identify their locations in the city.

Outside the city limits of East St. Louis were other black strongholds. Rudwick (1964) states that the city of Brooklyn was in 1917 "a Negro village whose total population of men, women, and children was under two thousand" (Rudwick 1964:11). Venice and Granite City also had black residents and in 1917, a settlement began at the old town of Venice on Kerr Island that would grow over the years by the addition of black migrants from the south.

The rapid influx of laborers in response to the expansion of industry would seem to indicate that the city of East St. Louis was prospering at this time. However, this was not the case. The program of tax breaks that the city had implemented in the late 19th century to entice the industries into locating there had grown into an unhealthy marriage of politics and industry. Business was either allowed to incorporate into its own city boundaries to avoid taxes, or corporations were assessed at an extremely low property tax rate. The assessed property valuation in East St. Louis was less than half the valuation in Illinois cities of similar size such as Peoria and Rockford. The difference was made up in saloon license fees (Rudwick 1964:191-192).

The political machine was headed by Locke Tarlton, chairman of the St. Clair County Democratic Central Committee and president of the East Side Levee and Sanitary District, and Thomas Canavan, Commissioner of Public Works. As leaders of the machine they controlled the mayor, city council, city attorney, tax assessor, and other elected officials and political appointees. They profited from the many financial opportunities they were able to work out for themselves in business, real estate, and from robbing the city and county treasuries.

The East St. Louis system of misgovernment also profited the individuals who had commercial interests in the gambling, prostitution, and



drinking establishments in the "valley", as this congested district in the shadow of city hall was called. The city bosses profited from bribes and kickbacks from business leaders who turned their backs on the organized vice and corruption in city politics, as long as they were favored with low taxes and cheap labor.

The East St. Louis machine profited both the political bosses and the industrial interests in the city. However, the unskilled labor class and the middle class businessmen profited neither from the corruption and manipulation of government, nor from the profits of the industrial giants, which were directed usually from corporate headquarters in St. Louis, Chicago, or the Northeast. That the wealth of the city was controlled by nonresidents is demonstrated by the fact that out of 20,000 industrial workers in East St. Louis, the largest locally owned concern employed only 85 people (Rudwick 1964:150). In East St. Louis it was the small businessmen who reacted first to the corporate feudalism, special interest control of city politics, and the drain of city wealth, and demanded reform.

This reform movement, or "progressivism" as it was called, was a broad-based reaction of the middle class to the industrialization all over the country in all sectors of life, and the changes brought about as a result of the unbalanced distribution of wealth and power. The Progressives pushed for regulation of monopolies, raising corporate taxes, improved city services, improvement of housing facilities, labor reform, better education facilities, government reform, and a host of other social, economic, and political changes. The Progressive movement was a function of class consciousness, and acquired its greatest visibility and momentum in East St. Louis and other cities following events such as strikes, riots, tenement fires, and other circumstances where the inequities of life in the new and rising urban-industrial city were brought to light. Perhaps the biggest battle fought between the Progressives and the status quo in East St. Louis was the struggle in the early 20th century to regain access to the river waterfront, which was being tightly controlled by the railroads and the Wiggin's Ferry Company.

In 1911 this fight was taken up by the Commercial Club, a body of 400 of the representative business and professional men in the city. The concern of the club was both the right of access to the river that was denied the city, and the manipulation of city and state government policy exercised by the Wiggin's Ferry to maintain the strong monopoly they had enjoyed since the early 19th century. In a petition to the Illinois General Assembly Shoreline Legislative Committee, the club outlined their grievances:

" . . . East St. Louis, a city with a population of 60,000 (is) supposed to be on the Mississippi River, it is not on the river. . . (because) the Wiggins Ferry Company has usurped control of our entire waterfront, it has dominated and controlled our city officials; it has elected its servants to office; anyone daring to raise his voice in favor of the public has been destroyed. . . (and) the Wiggins Ferry did everything in its power to control the club, to throttle debate. . . the Committee compels the Wiggins Ferry to show by what right it excludes the public from the riverfront--not only have we succeeded in having the Commercial Club make such a declaration, but public opinion

has been molded to the extent that at last municipal election, only one Wiggins Ferry adherent was elected, and instead of the Wiggins Ferry being in control of the City Council by a two-thirds majority as formerly, it now stands five aldermen and the mayor lined up with the Ferry, while eleven aldermen stand for an open riverfront" (Illinois General Assembly 1911:128-130).

The Commercial Club went on to describe the means by which the Wiggin's Company acquired Bloody Island and the old channel of the river (described earlier in this chapter). The petition continues:

". . .If ever there was a trust, the Wiggins Ferry, in our opinion is entitled to first place. It was bad enough when it operated separate and apart from the Terminal Association. Now it is a part of the Terminal. Fourteen railroads constitute the Terminal Railroad Association. . . The Wiggins Company has a belt line up and down the river on the east side and a belt line around East St. Louis (and the same in St. Louis). . . The growth of East St. Louis and St. Louis is seriously handicapped by this octopus. . .and why does not the Government interfere? Gentlemen, the Wiggins Ferry Company is not alone powerful in our city, but its influence extends to Washington, for the president of the Wiggins Company, Mr. Cavanaugh, is the head of the Deep Waterway Movement. He is said to be a favorite at the White House (with the Congressmen and U.S. Senators). . .he has said that he does not want any steamboats to land in East St. Louis and none do land; and we are of the opinion that the president of the Wiggins Ferry has a motive. . .either to kill the deep waterway movement or then to see that East St. Louis is kept off the river" (Illinois General Assembly 1911:130-135).

The Commercial Club went on to cite Chicago and Mobile as examples of successful waterfront developments and referenced laws and supreme court decisions that proved the constitutionality of their claim to the riverfront. However, shortly afterward, the efforts of the group died when follow-up court action failed to materialize (Judd and Mendelson 1973:74).

The accusations by the Commercial Club paint a picture of corporate feudalism and boss politics in East St. Louis. This iron rule of the east side by special interest groups by and for business was sending the city on a crash course with both the middle class progressives and the labor class. However, of the two, the latter group was the most oppressed by the system, and the most volatile.

The pattern of rapid economic and industrial development in East St. Louis had resulted in a large influx of unskilled laborers dependent on the East St. Louis political machine for their livelihood. While it was a common saying that "you could always find a job in East St. Louis," competition for good jobs was fierce and the system, which involved rapid turnover of jobs to keep down union organizers and to break strikes, maintained a level of antagonism between laborers that prevented the working class from building a united front. This rapid turnover was accomplished by maintaining cheap labor surplus through colonization or bringing in laborers, usually poor blacks, by railroad. By 1917 East St. Louis industries paid only 17 to 30 cents an hour while nearby Belleville paid 30 to 35 cents for



employees, and East St. Louis workers were expected to include a kickback or fee, usually a percentage of their hourly wage, to their boss for the privilege of working (Kirschten 1965:371). As more and more blacks flocked to the industrial areas, where they were willing to work for even less than the low wages paid to whites, racial antagonism, inflamed by politicians, company leaders, and the press and combined with widespread corruption and lawlessness, erupted into one of the bloodiest race riots in history. The riot that occurred on July 2, 1917, took 46 lives, 39 of them blacks, and destroyed 25 blocks between Second and Tenth Streets and Pennsylvania and Piggott Avenues (Judd and Mendelson 1973:5,6).

In the ensuing trials and congressional hearing, the causes of the riot were closely examined and East St. Louis politics, business, and working conditions were finally exposed. In the report of the Congressional Committee, the July violence in East St. Louis was attributed equally to the activities of employers, labor organizers, and politicians who created an environment that made the riot possible.

The unhealthy situation for the working class was created by a surplus of labor and cutthroat competition for jobs. Job security was nonexistent and a constant turnover was maintained by industry to prevent unionization. All attempts at organizing against employers was met with failure, since blacks were not incorporated into unions because of a mutual prejudice between blacks and unionizers. As a result, blacks were used as strike-breakers, and in a few cases were colonized or brought in by the railroads to be used as scabs.

On top of the antagonism between laborers over jobs was an apathetic attitude by the company leaders over the corruption and graft in city politics, poor living conditions, the housing squeeze, and the indebtedness of the city. This overriding concern with protection of profits and corporate property at the expense of the welfare of the residents of the city, most of whom lived outside of the tax shelter enclaves, had been fostered by a history of tax breaks, business incentives, and a general laissez-faire approach to any locally-based commercial interests in the city. The typical view of the factory managers was one of complete unconcern about the goings on outside the company boundary. Representative Raker at the Congressional hearing characterized this approach to labor relations: "The main thing was to get the men in the plant to work and get the work, and then out again. . .you have never gone out in and about town to see the conditions of the laboring people, where they live. . . Now do you. . .know of any more certain way to bring about civic degeneration such as has been seen in this city, then for influential men, men easy in financial circumstances, employers of thousands of laboring men to be absolutely indifferent to conditions under which labor lives?" (Rudwick 1964:142-149). The legislators replied scathingly: "The greed that made crooks of the politicians made money grabbers of the manufacturers" (Rudwick 1964:153).

Little concrete change came about as a result of the investigations. The political system was challenged by The Committee of One Hundred, a large group of reformers representing the welfare of the citizens, and the Board of Police Commissioners was replaced by one that was independent of Mayor Mollman. The board began an immediate reform of the police system

and began cleaning up the town's gambling and prostitution racket. However, through strong political ties, Mollman was able to have the police board recalled and replaced with one dominated again by the political bosses.

The mayoralty system of government was also closely scrutinized and in the election of 1919, a commission system was proposed and supported by the corporate interests of the city. The commission form of government won, but it proved to encourage centralization of power in the hands of a few people and merely added an official sanction to the feudal system already strongly entrenched in East St. Louis. As a result, vice and corruption flourished and the tax system favoring large corporations was not changed (Rudwick 1964:93, 195-196; Judd and Mendelson 1973:11,12).

The change to official centralization of government was followed by increased concentration of power in the hands of a few people. The political machine prospered and vice operations reached an apex during prohibition (1919-1933), and continued strong until 1940. The "valley," with its prostitution and taverns, was closed during World War II under pressure by Scott Air Force Base. However, as the locally-based prostitution and tavern trade was closing, organized crime from Chicago moved into the city and surrounding communities on the east side, and established a widespread casino and gambling operation. In the next decade organized crime gained undisputed control of the basis of operation for gambling through violence, payoffs, and other methods. By 1950 organized crime was curbed somewhat and the blatant gambling was driven underground. Also in the 1950s, the construction of an interstate highway was placed through the "valley," thus eliminating finally the red-light district of East St. Louis (Judd & Mendelson 1973:5-15).

By the 1970s the increasing economic problems in East St. Louis finally spawned some serious evaluation of the political machine running the city. The problems that forced this change from the status quo were the worsening economic conditions in the city, the increasing visibility of local conditions as urban problems in general were made a national concern, civil rights pressures, and the rise of new constituencies in the city, including professionals, federal officials, and black leaders. Mayoral and council elections in 1971 were unique in the history of the city in that the white political machine was effectively challenged by the black sub-machine. Even more uncommon was the fact that both machines were closely challenged by black and white reformer candidates. The mayoral victory by James E. Williams, an acknowledged reformer, was an unprecedented break in the status quo (Mendelson 1970:3,73). The break with the white political machine has resulted in increasing control by the growing black majority, and a reorientation away from the special interest focus of previous administrations, although observers note that the deeply entrenched tradition of machine-style politics certainly cannot be changed overnight (Mendelson 1970:3-20).

#### ECONOMIC AND POPULATION CHANGE OF THE MID-20TH CENTURY

The decade of 1950 was a pivotal one for East St. Louis and all of the east side. East St. Louis reached a peak in population in 1950 with 82,295



residents, but has experienced a steady decline in population since then. By 1977, East St. Louis had suffered a loss of 22,250 people or 27 percent of the 1950 total. The population shift was from the older river towns (East St. Louis, Brooklyn, Sauget, and National City) into the newer suburban areas outside the city (Alorton, Centreville, Fairmont City, and Washington Park). However, by 1970 Centreville and Washington Park also began to lose population (by 11 percent and 10 percent, respectively), though Alorton and Fairmont City were still growing slightly (Donahue and Glickman 1977:1-14).

The rapid outmigration has resulted in a dramatic shift in the racial makeup of the east side. The most noticeable change has been a large out-migration of the white population followed by a large increase in black population. Between 1950 and 1970 white population declined by 50 percent, while black population increased by 75 percent. The pattern has been one of a steady increase in black population in a direction beginning in the inner city and extending outward to the suburbs. Much of the population shift has been directly related to the general economic decline and lack of employment opportunity on the east side. The largest outmigration has, as a result, been among white and skilled blacks, usually young men, which has resulted in a large proportion of dependent black females and children. While there has been some in-migration of blacks to the east side, most of the increase has been natural increase through childbirth. Statistics show that white out-migration has exhausted itself, and white decrease through death now exceeds the increase from birth and in-migration (Donahue and Glickman 1977:14-20).

The change in the east side demographic profile has been accompanied by a decline in the regional economic base. The decline partially reflects the general economic downturn everywhere; however, beyond the instability caused by the national economy, the problems in East St. Louis stem from much deeper ills. While the prime causes of the economic decline are very difficult to isolate, the results are graphic.

While the highly employable, taxable, and skilled population shifted to the outlying suburbs, the vacuum left was filled by dependent service-oriented residents. East St. Louis now has a population with a very high demand for services and a low capacity to contribute to the support of government. As the suburbs experienced economic and population growth because of their favorable locations outside urban tax districts, commerce and industry soon followed, forcing the continued relocation of segments of the city population because of the shrinkage of jobs. The President's Advisory Committee on Intergovernmental Relations in 1967 described the economic disparity between the central cities and their suburbs:

"The large central cities are in the throes of a deepening fiscal crisis. On the one hand, they are confronted with the need to satisfy rapidly growing expenditure requirements triggered by the rising number of 'high cost' citizens. On the other hand, their tax resources are growing at a declining rate and in some cases actually declining, a reflection of the exodus of middle and high income families and business firms from the central city to suburbia" (Donahue and Glickman 1977: 31-33).

High property assessments seem to be the major cause for resident and economic relocation along with considerations of social status, aesthetics, services, and safety. The high rate of tax assessment, coupled with a rising municipal tax rate, is indicative of a situation where East St. Louis is trying to draw more heavily on deteriorating local tax resources in an effort to provide necessary services. This is a self-perpetuating cycle of a greater level of dependence overburdening services. The overburdened services then deteriorate and make an area less attractive to self-sufficient residents and existing businesses. The relocation of more residents and businesses means there will be less taxes collected, fewer jobs available, and a heavier dependence on the remaining residents and business, precipitating more deterioration in the quality of service and so on (Donahue and Glickman 1977:34,35).

However, the decline of East St. Louis commerce had more effect on the employment stability of the population than it did on the tax base, since historically, the city has given generous tax concessions to big business and industry in the area. Even at its apex in 1920 when the east side ranked first in the nation in the sale of horses, mules, and hogs, was the largest aluminum processing center in the world, ranked second in the country as a rail center, and led the country in the manufacture of roofing material, baking powder, paint pigment, and coal production, of 131 cities in the nation with over 50,000 population, East St. Louis ranked second to last in income from taxes and in the value of public property (St. Louis Post Dispatch 1977). In a city that received the bulk of its revenue from tavern licenses and wage earners, the decline of business eroded the one resource the city had always been able to lean on, its employed residents.

How could the city's industrial base, one of the largest in the country, decline to such a low level in less than half a century? The question involves both national economic trends and individual industrial sector fluctuations. Historically, the largest employer and most visible industry in East St. Louis, the railroads, have been the lifeblood of the city in terms of providing cheap fuel from the Illinois coal mines for the local industries, linking the East St. Louis manufacturers with the national market, and serving as an export industry for the movement of goods that neither originate nor are destined for the local area through the St. Louis gateway. Despite good connections to the national railroad network, the rail system at the local level is fraught with difficulties that hamper the efficient transfer of freight and movement of trains through the gateway (Donahue and Glickman 1977: 37-38).

The local history of railroads has been marked by over-expansion, bankruptcy, mergers, federal receivership, and antiquarian technology that has lagged behind the demands of the competitive transportation market. Even as early as 1922, engineers were examining the St. Louis-East St. Louis railroad system to determine changes that could be made to improve the inadequate facilities (St. Louis Chamber of Commerce 1922). In 1977, rail operations had fallen so far behind current technology that it took an average of 36 hours, and sometimes as long as 3 days, for a railroad car to pass through the gateway. Beginning shortly after World War II, the trucking industry began making inroads into the shipping commerce. The



general decline of St. Louis as a national transportation gateway, the gains made by trucking and to a lesser extent barge transfer, the contraction of the local industrial shipping market, and the relatively high operating overhead of railroads has caused a disastrous decline in the industry. Over a 15 year period between 1962 and 1977, railroad employment dropped 59 percent in St. Clair County, representing a loss of over 2000 jobs mostly in the city of East St. Louis (Donahue and Glickman 1977:37,38).

Even more important to East St. Louis than railroads was manufacturing and heavy industry. In 1950 over one-third of the East St. Louis work force was employed in some form of manufacturing. However, since then, industry in East St. Louis has had to face the question of adaptability and survival. Because much of the industry on the east side originated during the golden era of manufacturing between 1890 and 1920, these factories are in need of repair and modernization. Some industries can never be adapted or renovated because of market changes that have rendered them obsolete.

In the face of such adverse conditions, compounded by a deteriorating transportation system and shifting water and fuel requirements that lessen the advantage once enjoyed by East St. Louis industry, many firms are finding it more profitable to relocate or invest in areas with a more stable and promising future. The stigma attached to East St. Louis as a result of a long history of political corruption, labor problems, crime, and violence is also a major stumbling block to redevelopment (Donahue and Glickman 1977:39-41). Indeed, Robert Koepke (1974) maintains that much of the bad image of the east side is due to poor public relations and the fact that the fragmented communities that make up the east side know very little about themselves and how they developed to their present condition (Koepke 1974:52).

Perhaps the biggest battle to be waged by the east side leaders will be the fight to put to rest the stigma attached to East St. Louis and environs. Saddled with a legacy of graft, corruption, violence, and corporate feudalism, the east side is faced with problems of tradition and policy inherited from the late 19th and early 20th centuries. If there is some consolation in the fact that the uphill battle is not a new development for East St. Louis, then perhaps the history of the city, and the east side in general, will prove to be a valuable lesson for those involved in formulating future policy for the area.





## VI. THE ARCHAEOLOGICAL FIELDWORK: METHODOLOGY AND RESULTS

### INTRODUCTION

The long history of urban development and industrialization on the east side presents some very special problems to cultural resources management. Because the area poses a situation where populations (and institutions) have concentrated to maximize resources, sites or loci of human activity must be viewed in light of the interrelationships they share with other close components of the urban system. This holistic approach means simply that individual sites, as fragmentary remains of a much higher level of human interaction, cannot be understood separately from the socioeconomic fabric that makes the city much larger than a mere collection of railroad freighthouses, roundhouses, and residential structures.

The problem then, is how to devise a framework for implementing a holistic approach to the study and assessment of individual sites. This has been a major consideration in both phases of work for the East St. Louis MARGE project. The first task is to define the nature and extent of the urban system so that individual sites can be evaluated in terms of their potential for contributing to a better understanding of this system. This has been accomplished in the environmental, prehistoric, and historic backgrounds. The environmental, social, economic, and political trends and developments that emerged from these overviews can aid in this site evaluation both in terms of providing the context within which sites are assessed, and in increasing the amount of information available on specific sites. This way the questions to be asked during the fieldwork are concerned with only those aspects of an urban system or site for which answers are available through excavation, and are not questions that can be better addressed through archival research, oral history, or some other mode of documentation.

Another result of the holistic approach to urban studies is that the construction of a framework invariably leads to the discovery of activity loci that may not have been anticipated from the results of a physical examination of the area. This has been the case for East St. Louis, where much of the area has undergone transformation through natural river erosion and accretion as well as land filling. On the other hand, it may be found that large numbers of closely related sites, such as freighthouses or roundhouses, or very large sites, like the National City Houses or the Kerr Island community, present the possibility that some sort of representative sample can be documented, investigated, or preserved so that funds are not wasted on duplication of effort. The special problems involved in the East St. Louis MARGE project reconnaissance prompted Smith and Lange (1980) to strongly recommend a regional approach to future research in the area. It is now apparent that the project area should be treated as a multiple resource district. The holistic orientation of a multiple resource district assures that large groups of sites, closely related sites, or potential sites revealed in a literature review will be afforded the special treatment needed for good preservation management, as well as providing that the work will be done in the most economically efficient way.

The discussion of the fieldwork and results is organized in terms of discrete areas of investigation or subcategories within the multiple resource district. These areas include: Bloody Island, Illinoistown, National City, and Kerr Island. The historical framework will be summarized for each area and additional site-specific information not included in the historical overview will be cited. Following that will be a description of the field methods and results of the testing investigations and field documentation. Recommendations will be made based on the fieldwork for both specific sites and for the district subareas.

#### BLOODY ISLAND

The morphological and economic development of Bloody Island is well documented in Chapter V. First appearing around 1800 as a sand bar, the island grew throughout the first half of the 19th century in conjunction with the natural diversion of the Mississippi River east of the island and erosion of the Illinois shore. By the mid-1840s, St. Louis was threatened with the possibility of becoming a land-locked city while the residents of Illinoistown watched the encroaching river push closer and closer to the town limits. The harbor improvements project carried on by the Corps of Engineers, the city of St. Louis, and the Wiggins Ferry Company between 1844 and 1851 redirected the river west of Bloody Island, thus restoring St. Louis' harbor and leaving the island and old river channel between Illinoistown and the riverfront (Figures 4-9).

The Wiggins Ferry Company came into possession of the island and the old river channel, and by the Civil War the island had become the terminus for the expanding and growing continental railroad network and a ferry transfer facility for the movement of passengers and freight to St. Louis. The island became the location for railroad freighthouses and roundhouses, while the old channel was filled and used to expand the acres of railroad approaches and railyards needed for each railroad company on the island.

Though the railroad and ferries dominated the island, other land uses included pockets of residential areas and scattered commercial and public utility development. The extent of non-railroad use decreased on the island during the late 19th and 20th centuries. Following the decline of railroad use on the island and the general economic decay of the east side in the 20th century, Bloody Island experienced a process of land abandonment and absentee land ownership.

Part of the earliest occupation of Bloody Island, in addition to the railroads, were the houses built by the Wiggins Ferry Company for construction laborers and railroad workers. These houses were presumably built during the major period of railroad construction, or between the late 1850s and the Civil War. Baldwin (pers.comm.) notes that these tenement houses, single and multi-family dwellings, were offered for sale on a two-year installment plan with most of the housing going to Irish and German immigrants.



There were three separate clusters of housing on the island known locally as the Upper, Middle and Lower Patches. The Upper Patch, in the northern part of the island, was situated on Winter and Spring Avenues. According to a local informant there were, at one time, also Summer and Fall Avenues (personal communication 1981), though they cannot be located on any of the maps. They were possibly removed by railroad expansion or were perhaps renamed. The Upper Patch declined in the 1920s and was completely gone by the late 1930s. The location of the Upper Patch was later used by the Wabash Railroad.

The Lower Patch, located just south of the Eads Bridge, may have been the oldest of the three settlements. A painting of St. Louis and the east side shows a large settlement on the southern half of the island in the late 1850s (Plate 3). Though it is difficult to gauge the accuracy in the details of the painting, the cluster of structures south of the main dike and landing would suggest intensive use south of the Broadway Avenue dike. Whether this development was residential or purely commercial or mixed is difficult to determine. There is no indication of settlement where the Middle Patch or Upper Patch should be located, so possibly the other two settlements were established later as the island's railroad and commercial base expanded. The southern orientation of Bloody Island development can be attributed to the placement of the first two dike roads from Illinoistown, located on the original shoreline behind the southern end of the island.

A second early view of Bloody Island are two photographs of the Eads Bridge taken around 1871 (Plates 5 and 6). The photographs ostensibly were taken to show the progress of bridge pier and truss construction, and provide a glimpse of the waterfront development at this time. The large frame structures on stilts along the immediate waterfront are grain elevators and the long frame buildings are railroad freighthouses. The large two-story frame building north of the bridge (to the left) at the corner of Front Street and Broadway Avenue has a sign labeled "Restaurant" and is possibly also a boarding house since it is so large (Plate 5). The structures to the south of the bridge (to the right) may be part of the Lower Patch, though it is difficult to distinguish the domestic houses from commercial structures in this photograph. In addition, the camera angle may be such that only the structures closest to the waterfront are visible and the domestic enclave behind the levee and Front Street may be obscured.

The Lower Patch may have been already removed or relocated. This settlement would undoubtedly have been impacted by the construction of Eads Bridge, which required an extensive area for the wagon and railroad approaches within this block. In addition, the tornado of 1871, which destroyed scaffolding around the east pier and wiped out some railroad structures and lumber yards, would probably have destroyed some Lower Patch structures in its path across the island. A few years later this section south of the bridge (between Broadway Avenue and Bogy Street) was used by the Louisville and Nashville Railroad for their railyards and freighthouses (Figure 9).

The Middle Patch has been the sole survivor of the three residential settlements on Bloody Island. From the beginning, it was probably more

important than the other two since it has both the Presbyterian Church and Douglas School, and was centrally located on the island between the two major access dikes (Missouri and Broadway Avenues).

A rare view of the Middle Patch is pictured in Fred Grafts' 1906 pictorial history of East St. Louis. Grafts' views depict the riverfront along the levee north and south from the pedestrian walkway of Eads Bridge (Plate 12). The riverfront photographs show the towering grain elevators along the riverbank, the tracks of the Terminal Railroad, Front Street, and the railroad freighthouses east of Front Street. The Middle Patch is the cluster of houses east of Front Street in the right-hand corner of the picture. The houses are located east of the street since the valuable lots next to Front Street were used by the railroads.

Elements of the Middle Patch that have survived to the present can provide some additional information about life on Bloody Island, changes in the settlement size and house styles, the social and economic spheres of the Middle Patch, and other questions through interviews with local residents in conjunction with architectural and archaeological investigations. These studies were initiated at the reconnaissance level by the Illinois State University (Smith and Lange 1980). Because of the potential research value inherent in the archaeological deposits, the few surviving houses, and the available oral history, testing investigations were recommended by ISU and carried out by WAPORA in the fall of 1980.

#### INVESTIGATIONS IN THE MIDDLE PATCH

Despite the notoriety of Bloody Island as a major rail terminus and ferry transfer point, there is virtually nothing written about the history of these little islands of residential settlement situated in the midst of teeming railyards, warehouses, engine shops, and other commercial structures. However, a fascinating, but incomplete, account is available through the oral tradition and life histories carried in the memories of some of the older residents. We were very lucky to find several such people who enthusiastically recounted stories that had been passed down to them, and remembered incidents in their own lives that can enrich the understanding of Bloody Island and augment what is documented through archival research and archaeological excavation. Much of this oral history is too detailed and extensive to present fully within this report. However, tape recordings and transcripts have been maintained so that this information can be used in later stages of work on the MARGE project or for other studies of East St. Louis.

Mrs. Erie Belle Touchette has been an important contact for the oral history study since she grew up on the island as did her parents, grandparents, and great-grandparents. The Wolfer family, Mrs. Touchette's great-grandfather and relatives, came down the Mississippi River from Wisconsin and settled on the island in the 1850s. Soon after, he entered the prosperous business of supplying steamboats with provisions. This led Wolfer to establish one of the early stores at the Middle Patch to service the local residents, island employees, and transients (personal communication 1981).



## The Wolfer Store

The Wolfer store (Figure 3a) was an important general supplier for the community throughout the late 19th and much of the 20th centuries. A late 1920s photograph of the interior of the store (Plate 13) depicts members of the Wolfer family behind the counter waiting on a stiffly posed customer. The photograph well illustrates the diversity and arrangement of goods available in this establishment. The canned goods along the back wall contain everything from apricots to beans. There is candy along the left counter including Hersheys, Oh Henry, chocolate soldiers, gum, and a machine dispenser for something hot, perhaps hot jaw breakers. Other goods include tobacco, castile soap, pickles, meat, bread, and pots and pans. Though not visible in this photograph, the store also carried dry goods such as dried beans, flour, corn meal, and various hardware supplies (personal communication 1980).

Like most general stores of the early 20th century, the Wolfer Store operated on a credit system. Every customer had a "credit book" or ledger in which purchases were entered. Then periodically, usually on payday, customers settled up their account with Wolfer and began a new tab.

The credit system at the store should indicate a stable local resident population, as opposed to a transient situation. After all, the use of credit connotes a degree of confidence and familiarity in customers reminiscent of the country store. As job turnover was sometimes high for East St. Louis residents and other urban areas, the ability to get another job somewhere else in the city was apparently certain enough to ensure a credit system and a stable island population. Perhaps also the cash income from nonresident laborers provided the financial buffer that permitted local credit.

Though Wolfer also delivered orders, the local clientele provided the market base on which the store prospered. This included the hundreds of residents in the middle settlement, and many hundreds more railroad workers who labored all over the island and utilized the Wolfer store as a convenience for small purchases. Possibly each "Patch" had its own general store. A 1919 valuation map for the Terminal Railroad Association depicts a two-story frame store and residence at the corner of Front Street and Winter Avenue that probably served the Upper Patch and local railroad workers.

The Wolfer store also was partly residential. The bottom story was the store and the second story was private. The Wolfer house remained in use as a store until 1972 when the decreasing resident and working population became so reduced that the business was forced to close for lack of support. The store was converted to an apartment and the building became a multifamily dwelling (personal communication).

The old Wolfer store is still in use as an apartment house (Plate 14a). Much altered through the years, the house is hardly recognizable as a mid-19th century store. The two-story frame structure is



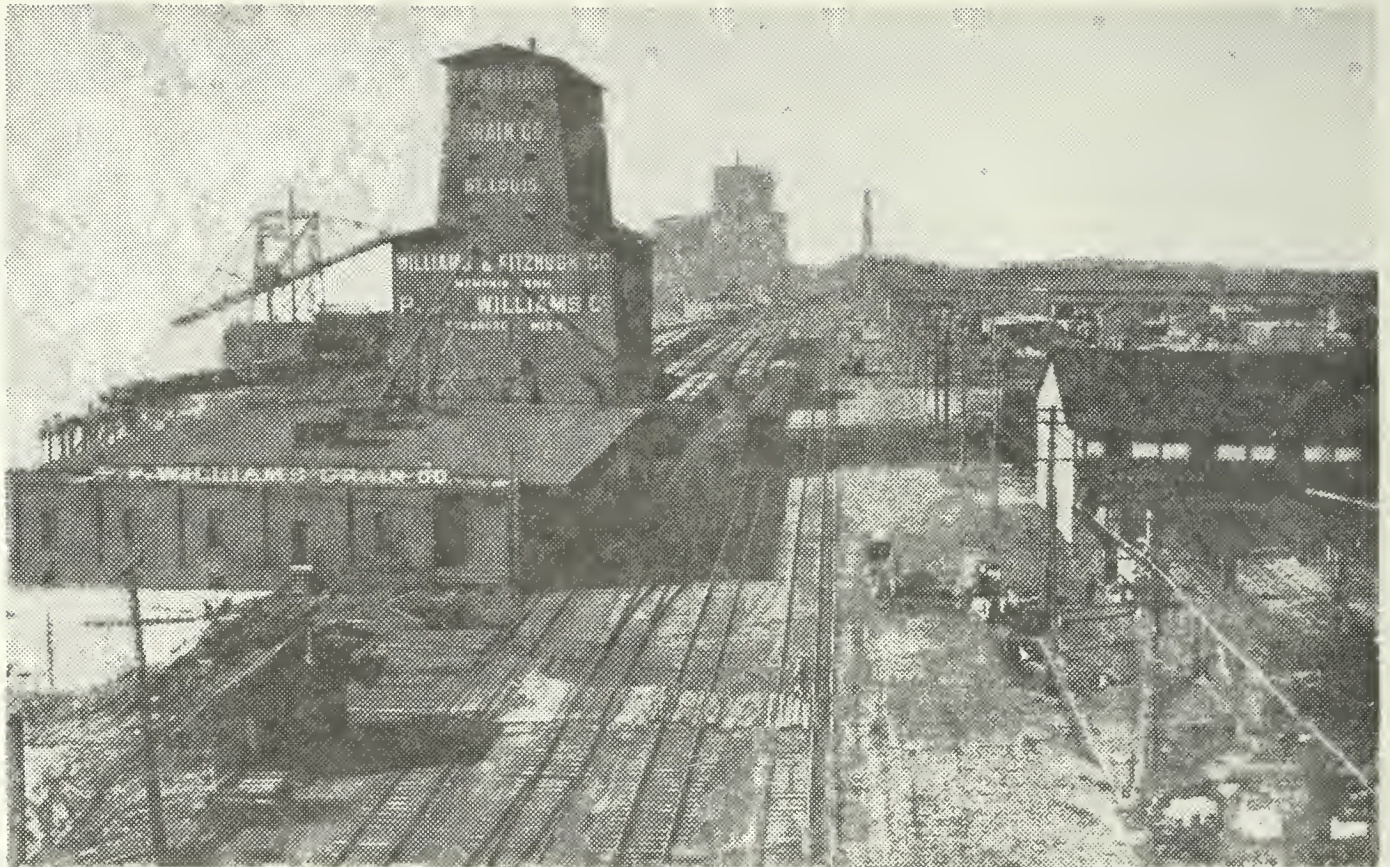


PLATE 12. A. 1906 View of Front Street Looking North from Eads Bridge.  
Courtesy of the Missouri Historical Society.

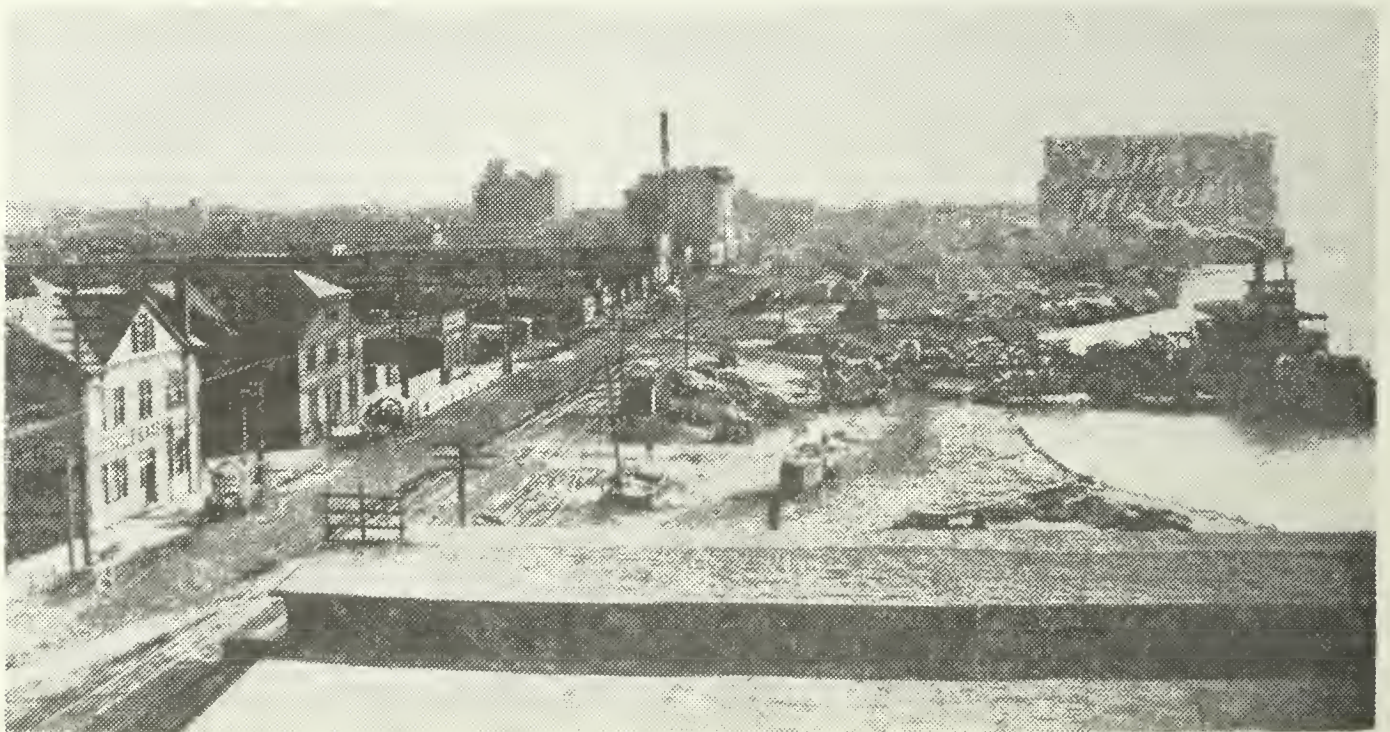


PLATE 12. B. 1906 View of Front Street Looking South from Eads Bridge.  
Courtesy of the Missouri Historical Society.





PLATE 13. The Interior of the Wolfer Store ca. 1929. Courtesy of Mrs. Erie Belle Touchette.



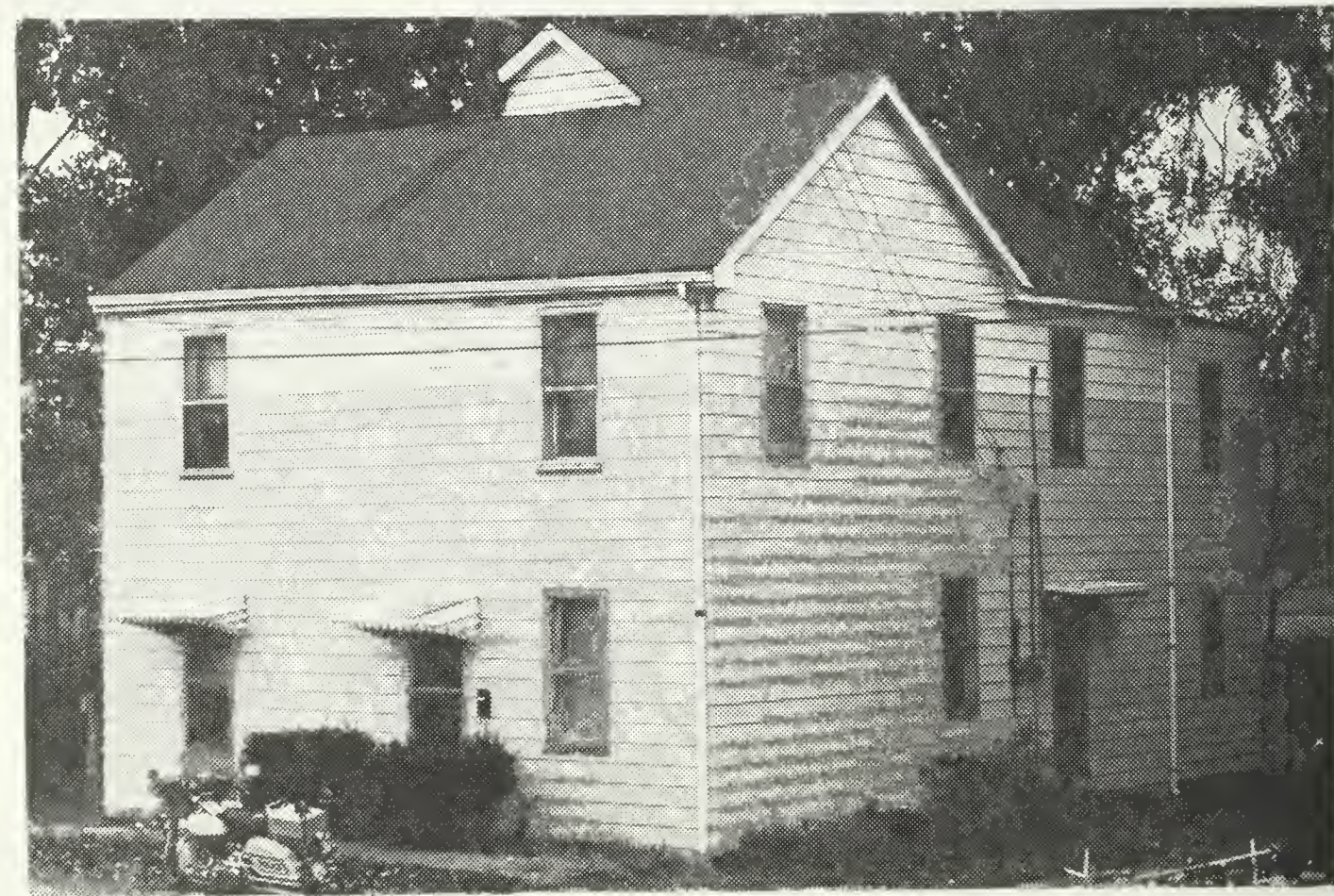


PLATE 14. A. Exterior of the Wolfer Store in 1980.  
View is to the Southwest.

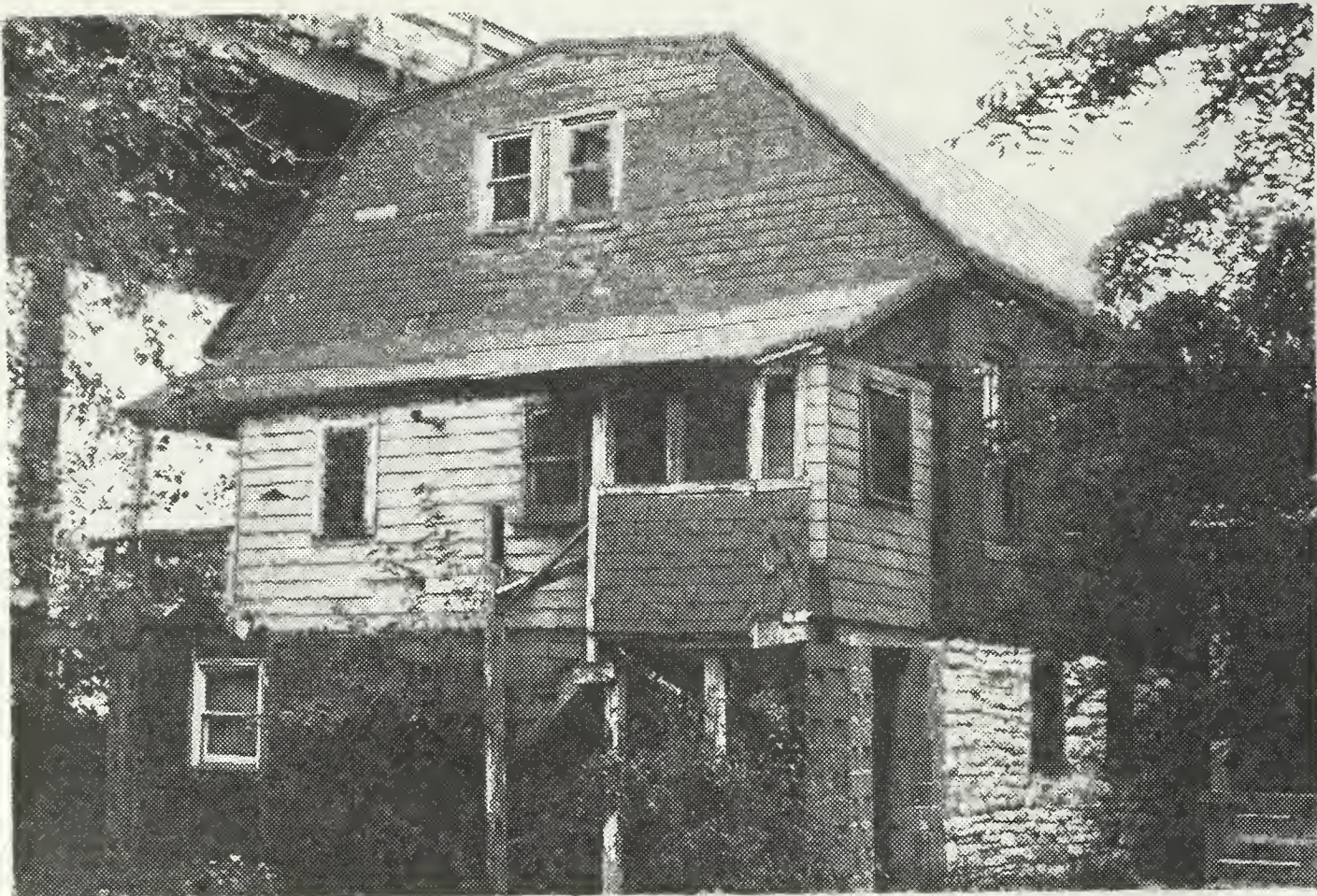


PLATE 14. B. Rear of the B Street House in 1980.  
View is to the Southwest.



protected under pink aluminum siding. It has two entrances, an indication either of its use as a combination store/residence, or its utilization for multifamily residence.

The structure has gone through at least three building phases. The front two-story portion is the original 19th-century house built probably by the Wiggins Company. Attached to this front section is a two-story addition with a gabled roof facing B Street and perpendicular to the front gable. The front part has an interior unbalanced chimney while the back part has a central chimney. Both chimneys are red brick (Plate 14a). The third section is a two-story shed roof addition on the back. Previously a single-story shed addition projected off the rear of the house. This part served as a coal shed for storage of coal in bulk for sale at the store.

The Wolfer structure sits on a limestone foundation. The foundation is attenuated when compared to other tall foundations in East St. Louis that were required so that the first floor was at high grade level. The Wolfer store was constructed before the high grade law was passed in the 1870s. Large portions of the island were never raised to high grade and though some filling was done to raise B Street, it was mainly the major thoroughfares such as Front Street, Broadway, Missouri, and Trendley Avenues that were raised to the high grade.

The Wolfer store, like many structures on Bloody Island, has survived the changing status of the island through modification and adaptation. While the Wolfer store is in a good state of repair, extensive remodelling has reduced the historical integrity of the structure, and has lessened its potential for contributing to our understanding of the architectural history of the 19th-century island residential settlements. However, since so few vestiges of the residential components of the island remain, the structure may warrant further investigation after a concerted oral history program has explored other sources of island history. The structure may warrant additional research at a later date and may be eligible for inclusion in the National Register of Historic Places.

#### Testing at the Wolfer Store

Testing investigations were conducted at the Wolfer store to explore and assess the archaeological potential of the buried cultural deposits related to the use of the structure. Preliminary metal detector survey and local informant interview revealed that much of the yard area around the house had been extensively disturbed through water, sewer and gasline installation. The impact from this activity had been especially severe on the narrow front and side yards of the house. For this reason, testing was restricted to the rear of the building.

Two five foot-square test units were placed in the back yard. Test Unit 1 was located near the rear entrance to the house, and Unit 2 was placed on the back lot property line (Figure 14). Test Unit 1 was excavated to a depth of 2.5 feet below ground surface. The unit was found to have been impacted by buried utility line construction to the extent that more than 4/5 of the unit lacked any contextual integrity (Figure 15). Included in Figure 15 is a section of concrete walkway

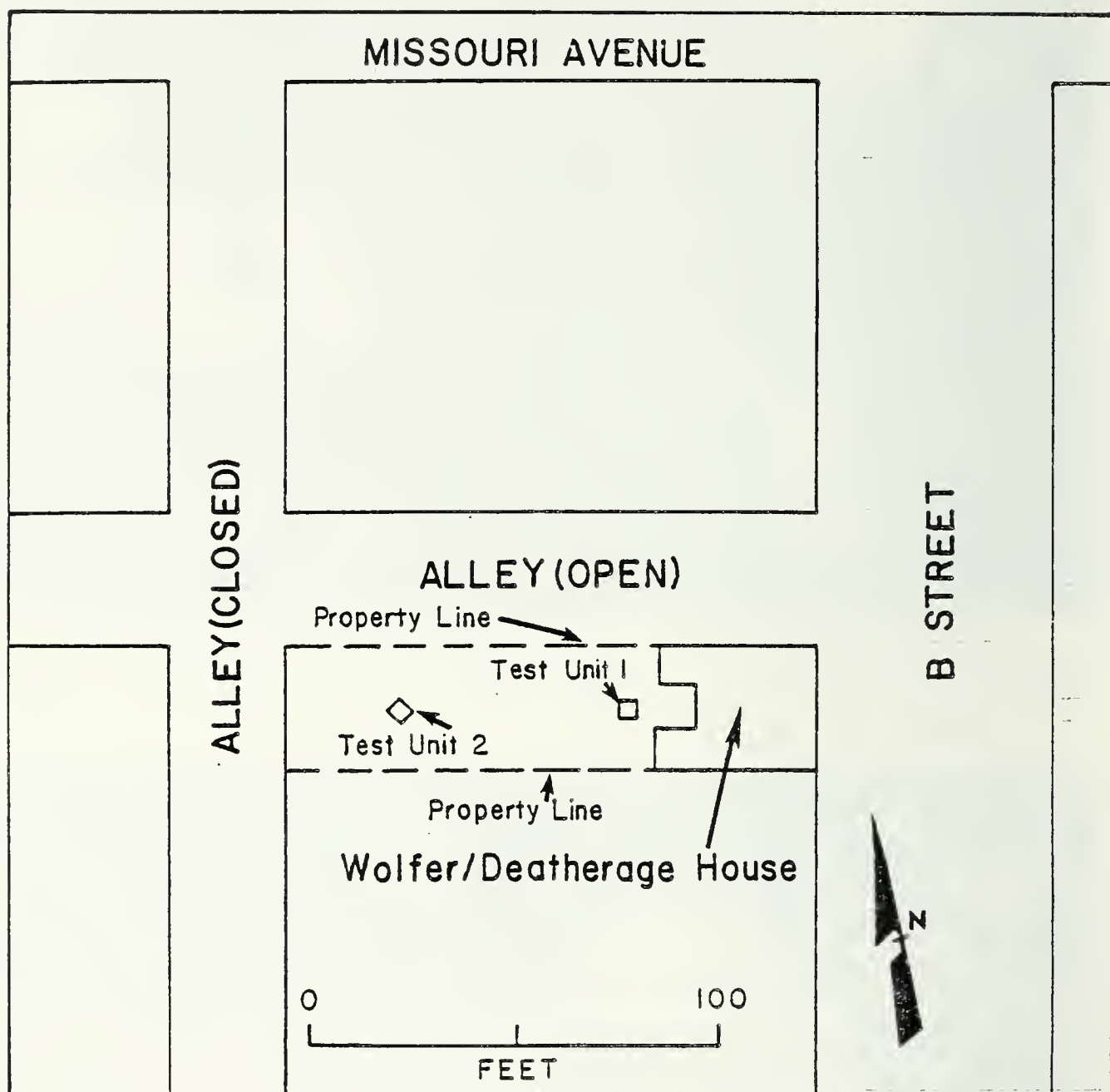


FIGURE 14. Site Plan for the Wolfer Store/Deatherage House.



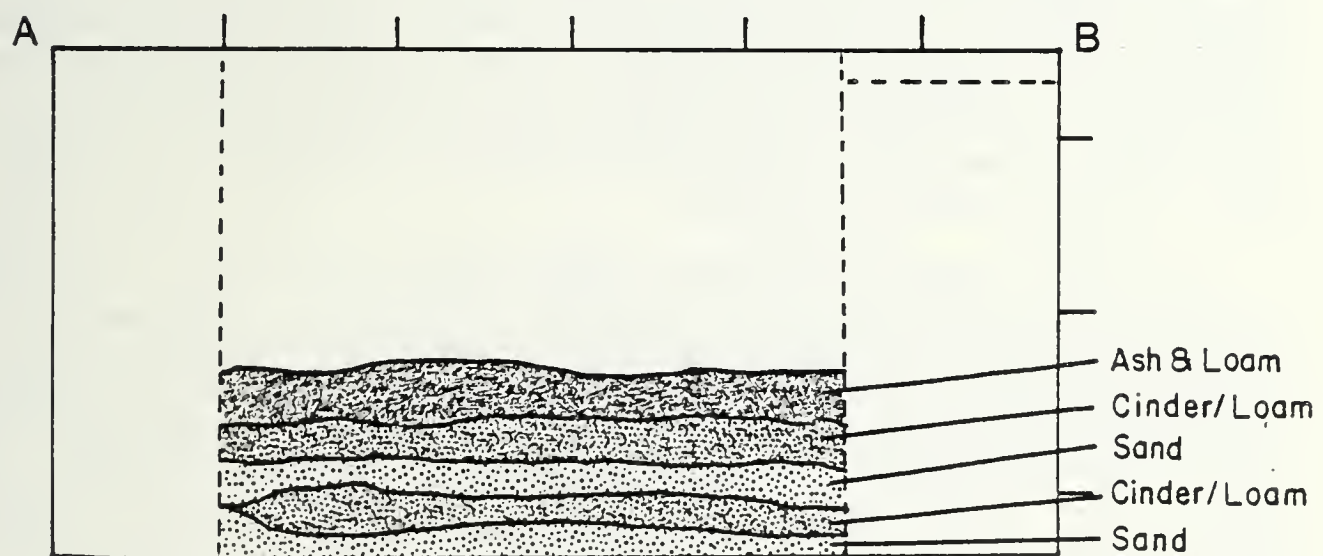
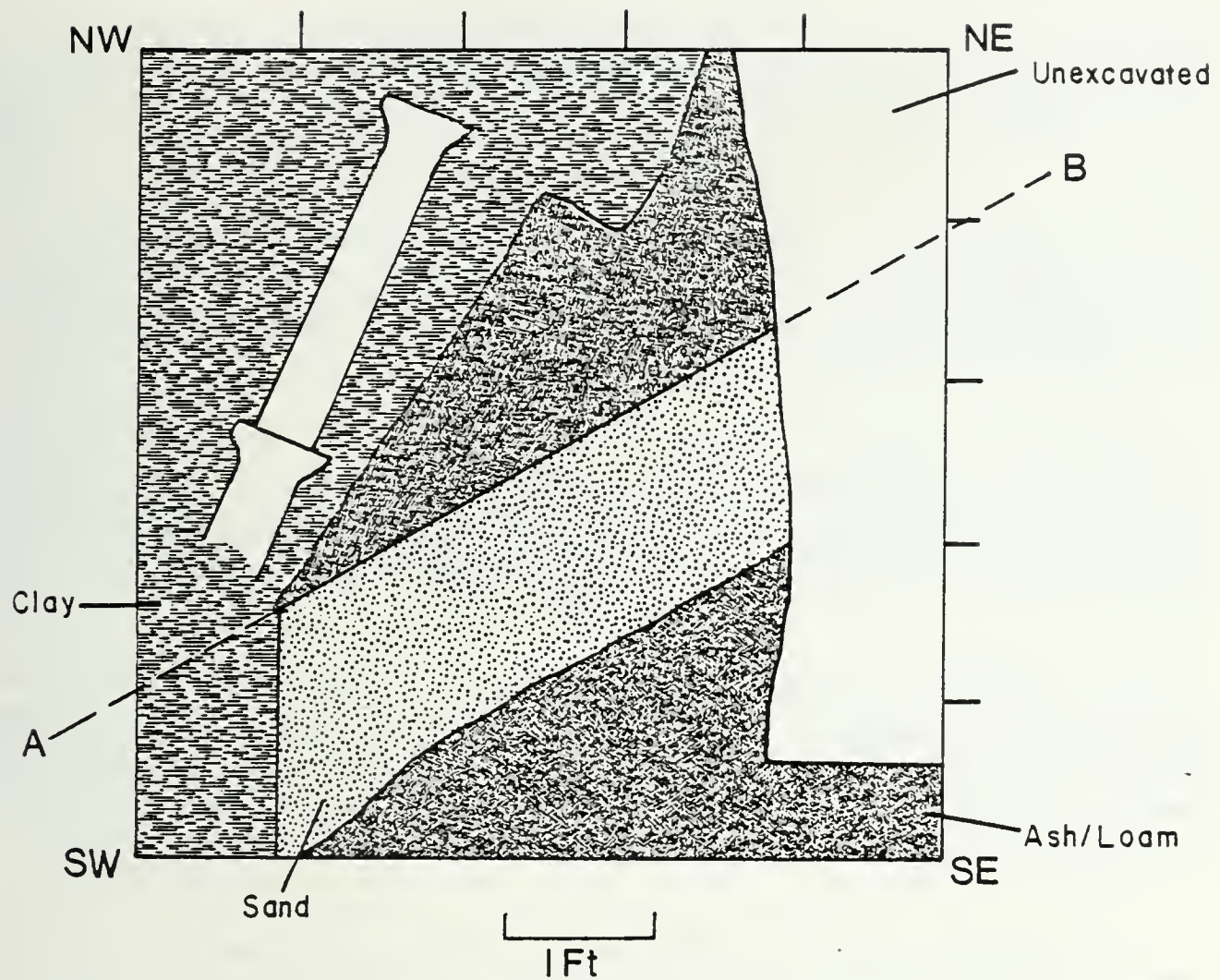


FIGURE 15. Wolfer Store/Deatherage House, Test Unit 1, Floor Plan and Profile.

located two inches below surface that prevented further excavation. At approximately 1.5 feet below surface, two intact sections were located that apparently served as balks between utility line trenches. The test pit was extended to a depth of 2.5 feet to allow mapping of these intact sections.

The surface was a sandy layer put down underneath the walkway to provide drainage. This layer was approximately a tenth of a foot deep and tapered out near the west side of the unit. No artifactual material was located in this layer, but the date of construction of the sidewalk was post-1960s, according to local informants.

Below the sand lens, extending to a depth of 1.5 feet below surface, was dark sandy loam material with ash and clinkers that had been redeposited over trench construction. Cultural material consisting of predominantly ceramics, container glass, window glass and nails (Appendix A) was found throughout this level. The bottle glass ranged in date between 1873 and the present, with a mode of 1933 to 1954.

The extension of this unit to a depth of 2.5 feet below surface was accomplished within the utility pipe trenches so that the intact sections were exposed for mapping. The trench fill was similar to the overburden, being a dark sandy loam with ash and clinkers. Artifactual material was similar to that in the overburden, but in smaller proportions. Dates for the bottle glass ranged from 1873 to the present, with a mode of 1930 to the present.

The inverted temporal stratigraphy of Level B (overburden) and Level C (trench fill) would be expected in trench fill that had originated from the excavation of the utility pipe trench. In the digging of the trench to lay the pipes in the 1960s (personal communication 1980), the top layers were mixed with the older, deeper cultural deposits. In addition, the refilling of the trench after the pipes were laid resulted in a higher percentage of the later artifactual material being buried with the early cultural material.

The intact balk provides some information on the original stratigraphy of this area. The balk profile indicates five layers of ash loam, cinder loam, and sand within this one foot-thick section (Figure 15). According to local informants, cinder and ash from coal burning stoves was deposited in yards and spread evenly. This waste from domestic heating and cooking also incorporated nails, and to a lesser degree ceramics, bottle glass, and food remains. However for the most part, the ceramics, glass, and food remains showed no signs of heating, and thus were probably deposited separately and mixed with the clinkers, ash, and nails in the leveling process. The lens of sand between the clinker layers may represent alluvial deposition by flooding.

Test Unit 2 was placed near the back lot boundary. In this location, it would have been situated on the Wolfer store property line, but close to the yards of houses on A Street. The unit was located approximately ten feet west of the septic tank serving the Wolfer house, and about six feet east of the A Street house steps. Houses on A Street were apparently oriented east facing the rest of the Middle Patch.



Unit 2 excavation revealed cultural material mixed with fill and demolition rubble. Level A consists of dark loam with artifactual material, including ceramics, bottle glass, and structural materials such as wire nails, hardware, and window glass. The bottle glass ranges in date between 1880 to present, with a mode of 1930 to 1954.

Level B consists of demolition rubble: cinder block fragments, red brick, stone, and lumber mixed with dark loam and artifacts from Level A. Constituent artifacts are therefore similar to those in Level A and consist of ceramics, a lot of bottle glass, and nails. Bottle glass ranges between 1810 and the present, with two possible modes: before 1917 and 1930 to present.

Level C consists of mixed dark loam and cinder underlying the rubble layer and extending approximately a foot and a half to sterile silt. Density of artifactual material was low compared to the above levels, but included the largest amount of butchered bone fragments and clothing remains encountered in this test unit.

As a whole, the results of testing at the Wolfer store were disappointing in that, except for a small portion of intact balk in Unit 1, no in situ remains were located. However, the profile in the intact section does suggest that stratified remains might exist in the absence of 20th century disturbance. The practice of coal stove waste dumping and refuse disposal in back yards might enable recovery of cultural material in discrete layers, corresponding to episodes of yard leveling and alluvial deposition of sand during floods. The wide range dates for the container glass indicates relatively long-term use (mid-19th century to present). In this case, however, the redeposition and mixing of the artifactual material has lessened the research potential of the archaeological deposits.

#### B Street House (S-680)

This structure is located on the east side of B Street directly north of the Martin Luther King Bridge. An analysis of its architectural details reveals that the structure was probably built during the last quarter of the 19th century. A 1909 map of East St. Louis shows a number of buildings along B Street one of which is presumably this structure (Figure 7).

Architecturally, the B Street house is reflective of the transitional period during which it was built, as well as demonstrating a number of changes that have taken place through time. One of the most obvious characteristics of this 2½-story house is its high grade foundation of coursed limestone rubble (Plates 14b, 15a). The foundation extends to a height of over six feet above original ground level. It is generally believed that this was done in response to the high grade policy beginning in the late 1870s, which required that all streets and structures in East St. Louis to be built at an elevation to exceed the height of the devastating 1844 flood. Although in many sections of Bloody Island





PLATE 15. A. Front Facade of the B Street House in 1980, Looking East.

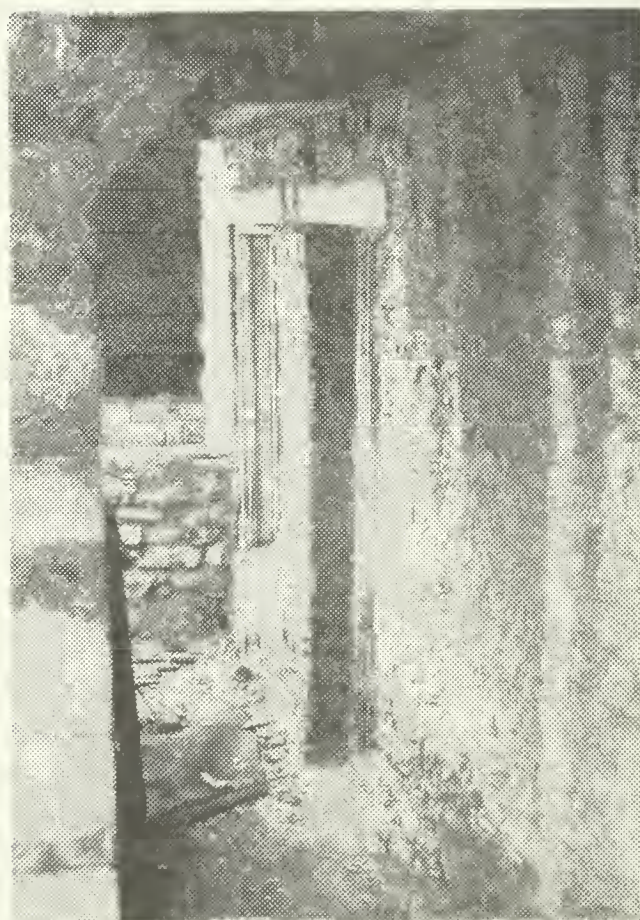


PLATE 15. B. First Floor Front Entrance to the B Street House in 1980. View is to the North.



the construction of high grade buildings and diked roads did reach this level, other areas of the island were apparently only partially successful in reaching their goal. The southern half of B Street is one such area. Along this section, B Street has been raised approximately three feet higher than the original ground surface. This has only affected the front of the B Street house, however, in that the entrance to the first floor, which was built on the original surface, is now partially submerged below the level of the street (Plate 15b). It is reached by several steps leading down to a sunken entranceway that is protected from slumping by a coursed limestone rubble retaining wall.

It is interesting to speculate on the thoughts that the builder may have had during construction of the B Street house. It almost appears as if the high grade policy was not considered to be very realistic by the builder, who pierced the fabric of the stone foundation with a number of openings, both doors and windows. Perhaps the builder intended to convert the bottom floor to a basement if the street was raised to the second story and the first-floor windows and doors were submerged.

The facade of the bottom floor has two doors and two windows, with a set of each placed close to the corners of the house (Plate 15a). All are capped with stone lintels. The south wall of this long, rectangular house has three large windows and a door, each capped by a brick relieving arch that extends into the fabric of the second story. The north wall also has a series of small windows that are capped by brick relieving arches projecting into the upper fabric. There is also an original ground level back door.

The fabric of the upper portion of the B Street house is brick, laid both in American common bond and in Flemish bond. In front, the second floor is reached by a series of steps, broken by a landing, that leads up to a porch extending the width of the house (Plate 15a). The present porch is constructed of wood and concrete blocks, and appears to have been built as a replacement for an earlier porch. The second floor of the house is entered in the front through two doorways. One can enter either through a central doorway or through a door located immediately to the left of the central door, as one faces the building. Both door locations appear to be original. This odd placement of front doors may indicate a dual function for this structure at some time in its past, but it is impossible to say what these functions were, other than that at least a portion of the structure was probably always used as a dwelling. The doors are flanked by two windows, one on either side. The window to the right of the central door still retains what appears to be its original one-over-one sash. The two doors and the other window, however, have been bricked in at some time in the past to incorporate smaller door and window frames.

Entrance to the second floor of the B Street house can also be gained through a modern concrete block, brick, and frame addition at the rear of the house. Four large one-over-one windows, with stone sills and brick relieving arches, provide light and ventilation on either side of the house. The present roof is of a low gambrel design. However, many of the neighbors have stated that they remember when the roof was gabled. The alteration apparently took place 20 to 30 years ago.

Local informants thought that the house was constructed at the same time the Wiggins Ferry constructed frame dwellings on the island in the mid-19th century. However, the architectural style of the B Street house as well as the material used (i.e., pressed brick) would suggest a later date. In addition, the apparent conformity to the high grade policy would place the date of construction after the late 1870s. Part of the controversy can be explained through an examination of Plate 9, which shows the amount of destruction that took place during the tornado of 1896. In the photograph, it can be observed that the B Street house was very badly damaged as a result of the storm. Closer examination reveals that the remains of the second floor appear to have been of frame construction. Thus, it can be hypothesized that the B Street house was originally constructed sometime between the late 1870s and 1896, and that it originally consisted of a stone first floor and a frame second story. Then, after the tornado of 1896, the second story was rebuilt out of pressed brick upon the original stone foundation. This appears to have been a common practice on the island, especially with the railroads. The expense of building a foundation substantial enough to raise the structure above grade level dictated that rebuilding in the event of loss of the original building would utilize the original support structure. Since the B Street house has apparently suffered a great amount of alteration and modification through time, the structure itself has lost its architectural integrity and does not appear to be eligible for inclusion in the National Register of Historic Places. This preliminary recommendation, however, does not include the results of the archaeological testing at the site.

#### Testing at the B Street House

Testing investigations were conducted at the B Street house to assess the potential of the subsurface archaeological deposits. Investigations were restricted to the back yard since the front entranceway abuts the street, preventing excavation in the front yard. A metal detector survey over the back yard revealed a general scattering of metal all over with heavy concentrations near the back door and in front of a backlot outbuilding. Two five foot-square test units were placed in the back yard, one near the back entrance and the second near the location of a cistern reported to be buried in the middle of the back lot.

Test Unit 1 was placed near the back entrance to the first floor (Figure 16). The first two strata encountered consisted of sandy loam with cinders (Level A) changing color at one foot below surface as the loam graded out, and at approximately 1.4 feet below surface was cinder (Level AB) that extended to about 2.4 feet below surface. The A level contained ceramics, container glass ranging from 1857 to present with a mode of 1930 to present, window glass, and other structural material. Transitional level AB contained similar material in smaller proportions (Appendix A). The bottle glass ranged between 1880 and the present with mode ranges of 1880 to 1910 and 1930 to present. The next distinct stratum, Level B, had fewer artifacts than Levels A or AB, with a range in bottle glass from 1867 to present and a mode range of 1887 to present. At the bottom of the B level was a well cap and a sewer pipe (Figure 17, Plate 16a).



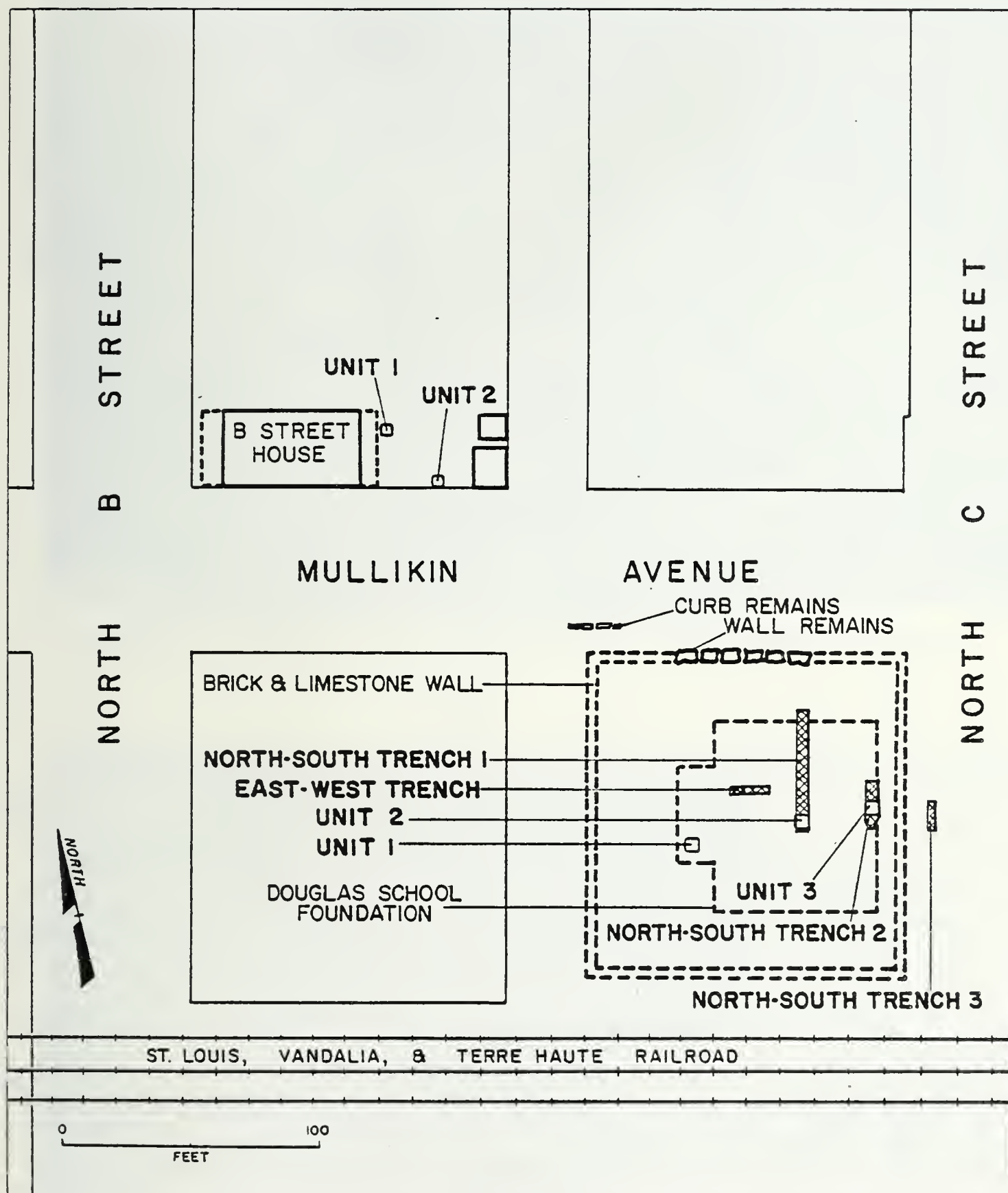


FIGURE 16. Site Plan for the B Street House and Douglas School, Based on the 1910 Sanborn Insurance Map.

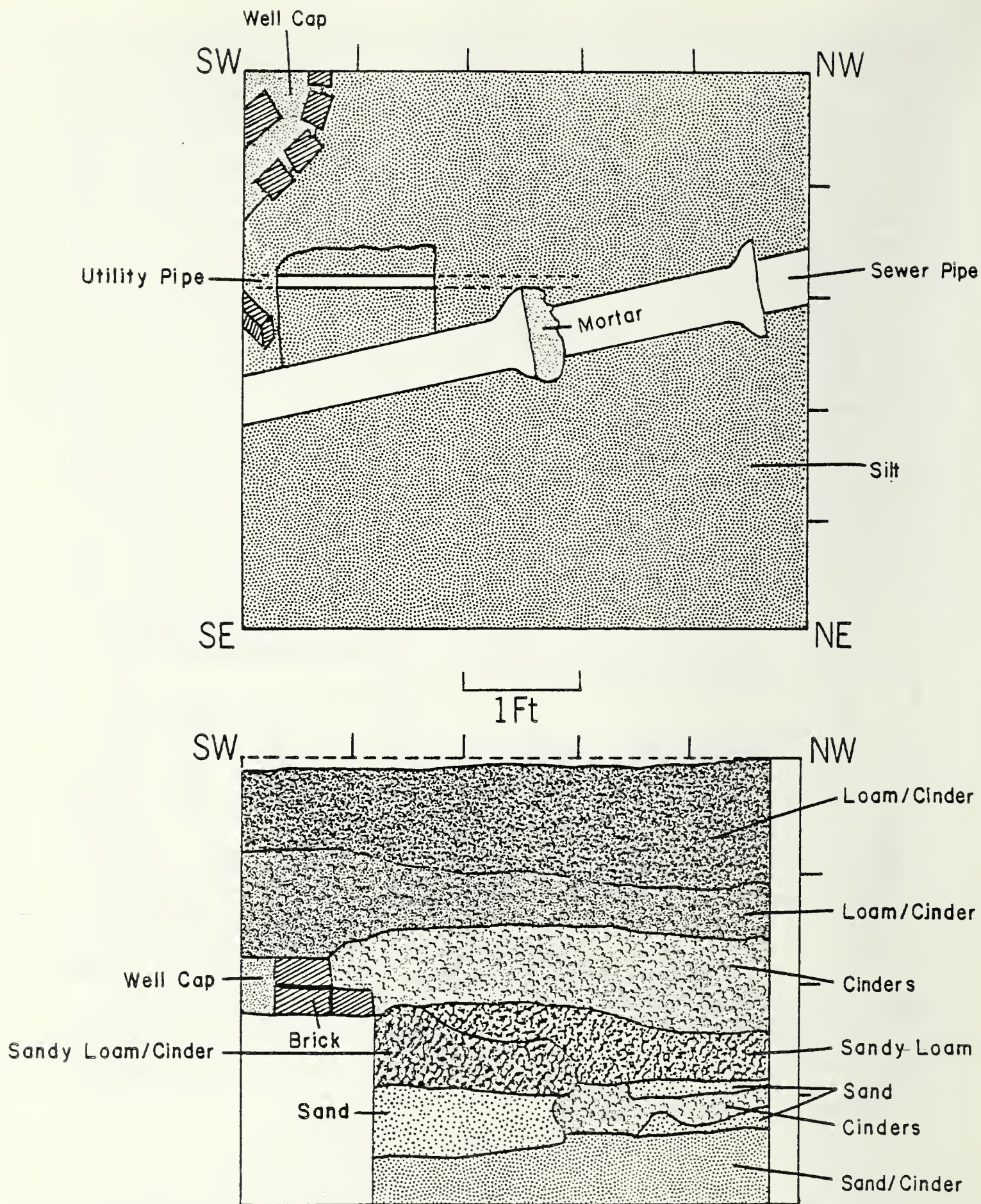


FIGURE 17. B Street House, Test Unit 1, Floor Plan (Top) and West Wall Profile (Bottom).



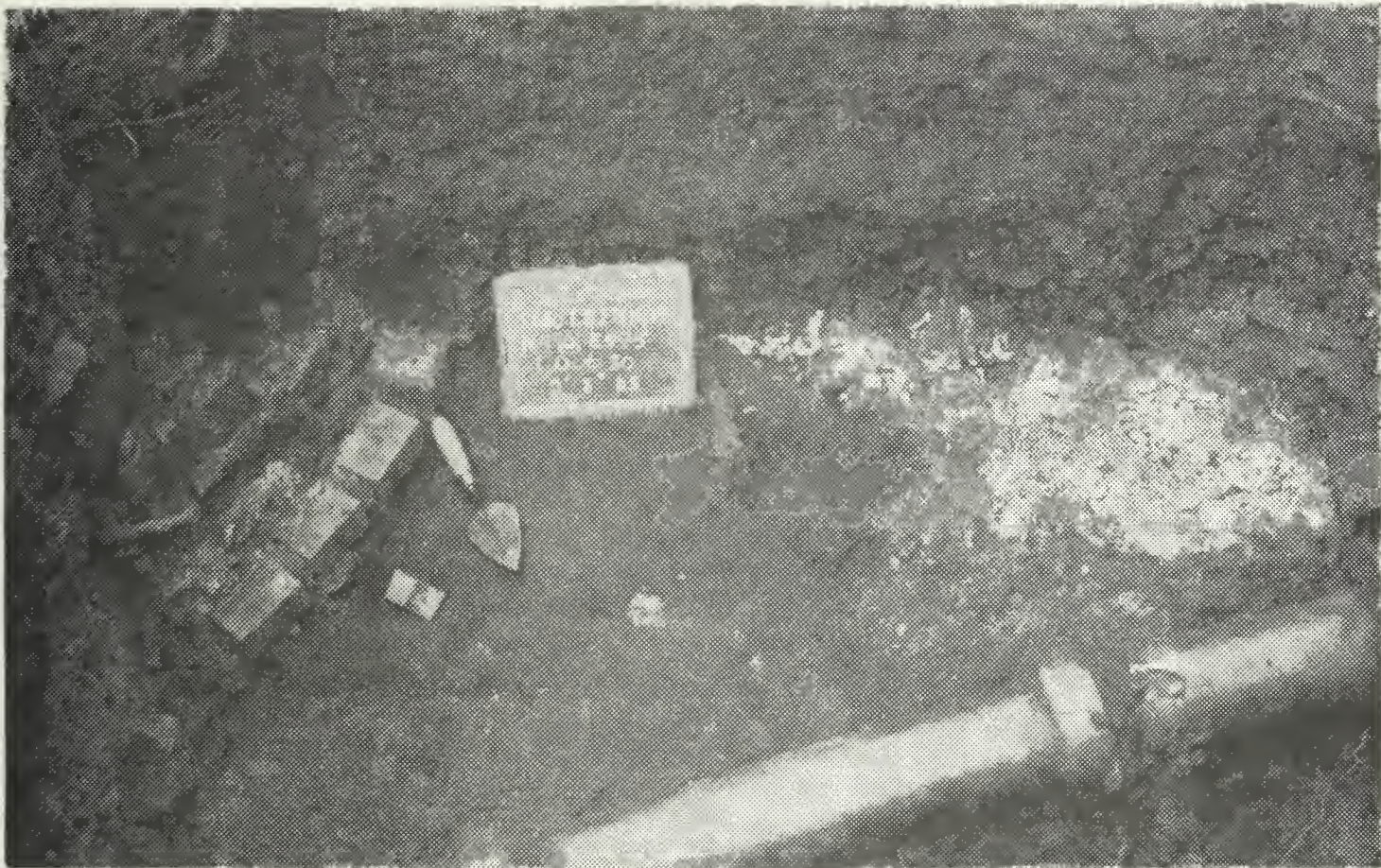


PLATE 16. A. Test Unit 1 at B Street House, Showing the Capped Cistern in the Upper Left Corner.

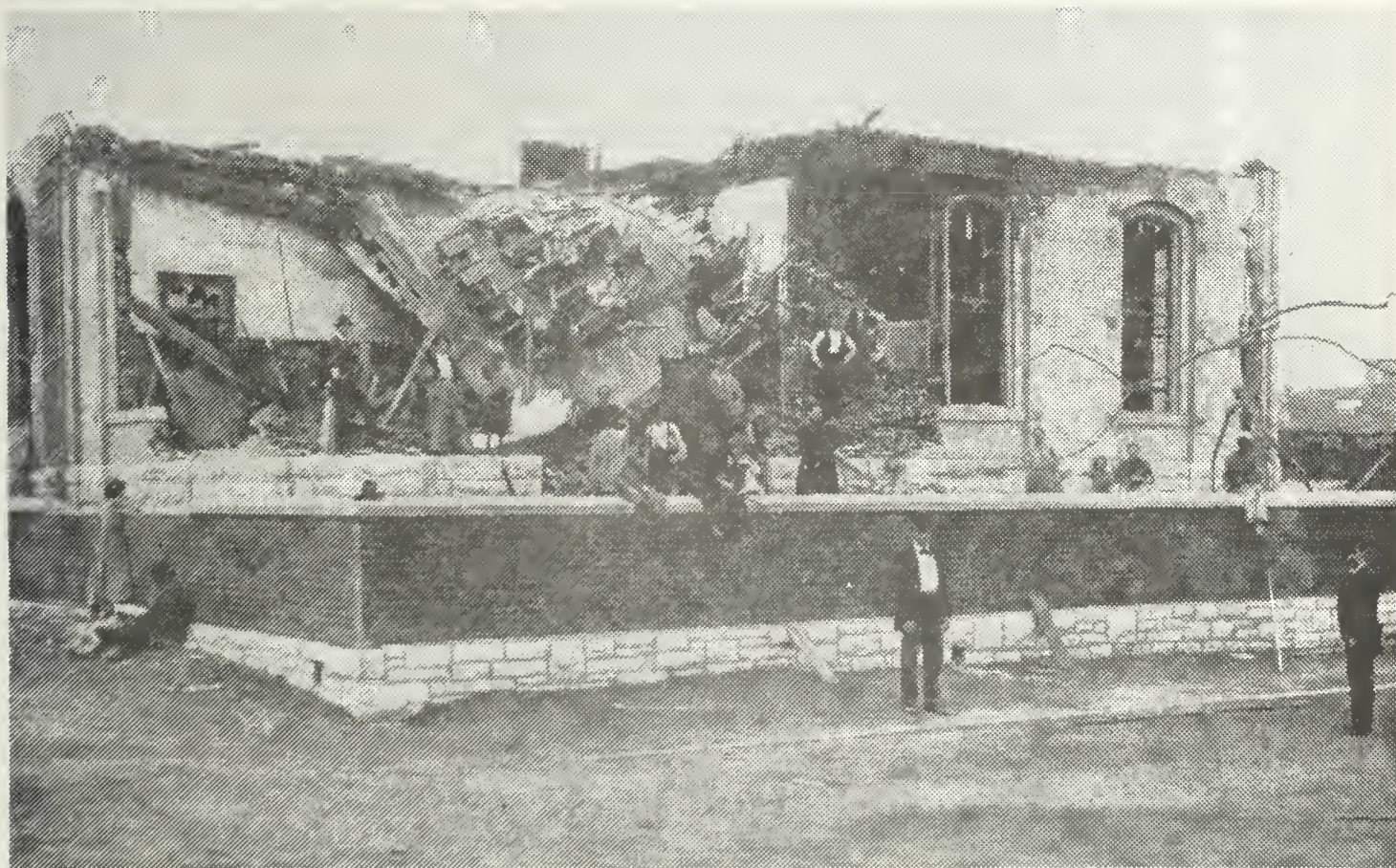


PLATE 16. B. Douglas School After the Tornado of 1896. View is to the East. Courtesy of the Missouri Historical Society.



Analysis of the artifactual material from Unit 1 revealed that Levels A and AB are actually mixed levels containing similar specimens of porcelain, ironstone, creamware, and earthenware (Appendix A). Though cross mending was not possible since most of the ceramics were small and the edges worn, the similarity of type and proportion strongly indicates mixing of levels, probably during installation of the sewer pipe, gas main and well cap in the latter half of the 20th century. The container glass range dates also support this thesis, though the range dates for many bottle types are too broad to aid in narrowing the occupation dates for even intact cultural levels. The trench outline could not be discerned from the natural levels in the cinder-loam matrix and so the sewer pipe trench was not discovered until the actual sewer pipe was uncovered. Below the sewer pipe another utility line, a gas main, was located in the silt layer. Despite the degree of mixing, there appears to be a vast difference in the artifact counts between Level A, the transitional Level AB, and Level B (Appendix A). Level A has much larger numbers of ceramics, bottle glass, and nails than the transitional Level AB and Level B. While Level B has a comparable ceramic count with Level A, it has more nails than A, but much less window glass and bottle glass. It is possible, but difficult, to prove that the transitional level is totally devoid of cultural material other than that amount that was inadvertently included in this level because of mixing of levels from the pipeline excavation. If this is the case, then Levels A and B are occupation layers separated by a culturally sterile cinder loam level.

Just below the B level is a stratum that marks an apparent demolition or renovation layer. Level C is located against the north wall and consists of sand loam with a large lens of crushed plaster board (Plate 16a). Located next to the wall cap and intruding into Level C is Level D, consisting of sandy loam with cinders. These levels would appear to be roughly contemporaneous. Artifact categories represented in these levels are ceramics, bottle glass, window glass, and nails.

The remainder of the unit consisted of Level E, a sand layer with artifactual material, and Feature 18, a cinder layer intrusive into Level E 3 feet below surface that extended out the north wall. Feature 18 contained an ironstone sherd, container glass, window glass, and butchered mammal bones. This layer probably represents early coal stove waste and table refuse disposal activity.

At about 38 inches below surface, sand with cultural material and clinkers was encountered. At 47 inches below this sand layer, a sterile silty layer began that extended to five feet, eight inches below surface. From that depth to at least seven feet, three inches below surface was sterile sand.

Test Unit 2 was placed at a possible cistern location in the back yard (Figure 16). The unit was excavated to a depth of about 14 inches below surface at which point it was terminated on top of a large concrete slab. The slab covered an old septic tank that had been mistaken by a local informant for a cistern.



The entire fill over the septic tank consisted of sandy loam and cinder that had been redeposited over the slab. Cultural material included ceramics, container glass, window glass, nails, building material and other common classes of artifacts (Appendix A).

The archaeological investigations at the B Street house, like the Wolfer store investigations, uncovered evidence of stratified coal stove waste disposal and trash dumping in the back lot. Unfortunately, the placement of the tests in areas where the stratigraphy was mixed by underground pipe installation, demolition, and septic tank construction prevented an accurate examination of these cultural levels. Even so, the data recovered from the testing is useful for understanding general disposal patterns, temporal range, and functions of the site. In addition, the capped well may contain useful archaeological evidence on the period before early urban utilities, when the city made available public water services and private wells were abandoned. Recommendations on the B Street house, as well as the Wolfer store, will be made in Chapter IX.

#### Douglas School (S-679)

When the Wiggins Ferry Company established the island residential settlement in the mid-19th century, one of the first public structures to be built was the Douglas School. The Wiggins Company donated land and \$6,000.00 for construction of the school, which was erected at some time in the 1860s. There is no good available description of the original school, but based on the architectural styles of the early island construction, it may be assumed that the school was a multi-story frame building on a limestone foundation. The school was destroyed in the early 1870s by fire (Reavis 1876:73).

The school was quickly rebuilt with limestone and brick. Two 1896 photographs of the second Douglas School building (Plates 9, 16b) show what remained after the structure had been destroyed by the tornado of 1896. The tornado damage was so extensive that only the first story of the structure and the wall surrounding the schoolyard survived. The brick building was built on a high, rock-faced coursed ashlar foundation. The high foundation reflected the new high grade policy of 1875 that required all new buildings to construct the first floor above the high water mark of 1844. The schoolyard was surrounded by a brick wall approximately five feet high, built on a broken, rock-faced ashlar foundation, and capped with corbelled stone.

The school was built to front on C Street and so the front entrance of the school faced East St. Louis. The east-facing entrance to the school consisted of a round, arched stone portal with a plain archivolt. The windows, consisting of a six-over-six sash, were capped with shouldered segmental arches.

The cross-section of the school shown in Plate 16b provides some good information on architectural details. The school was two-storied with four schoolrooms flanking a central hallway on each floor. The rooms each had a doorway opening into the central hall and had two tall

windows on each exterior wall. The rooms had wooden wainscots along the interior room partitions, and wooden floors on which desks were bolted. Plate 16b shows 14 desks bolted to what remains of a second floor schoolroom. A reporter gave this account of the effects of the tornado on the Douglas School:

"The family of Captain Henry Sachman, living opposite the Douglas School building on the Island...(heard the winds) and ran across the street to the basement of the Douglas School. She had scarcely cleared the front gate before the second story of the brick house in which she lived blew down. A moment later when the little party was safely hidden in the basement, the heavy school building collapsed...but the basement walls withstood the shock" (Curzon 1896:316).

The damage to Douglas School, the Sachman house, and the B Street house can be seen in Plate 9. This photograph, and Plate 16b, show the extensive damage to the school, which is missing the entire second story and large sections of the first floor. The strong ashlar foundation, 16 feet tall of which approximately 9 feet extend underground, is largely undamaged.

The school was rebuilt on the original foundation following the 1896 tornado. A 1910 Sanborn Insurance map depicts a relatively square (60 by 70 feet), two-story brick structure with a projecting room on the west side that measures 12.5 feet by 37.5 feet (Figure 16). The projecting room was used as a storage area for coats and wrappings (personal communication, 1981). The schoolyard wall remained intact in the 20th-century version of Douglas School. The Sanborn map further indicates that the school was heated by a furnace but was not illuminated by either gas or electricity. The plan of the school was apparently identical to the original Douglas School, that is, there were four rooms on each floor. However, local informants remember that by the second quarter of the 20th century, the school was used for only grammar school levels. After graduation the island children went to school in East St. Louis.

Douglas School remained in use through the mid-20th century. The school is located on 1954 USGS 7.5 minute topographic maps, but is absent from 1959 aerial photos of the island. Apparently the school was abandoned some years before this date, and by the late 1950s was demolished and all above-ground foundation remains buried under a gravel parking lot. The site was investigated during the testing phase fieldwork to assess the condition and significance of the subsurface deposits.

#### Testing at Douglas School

Despite the large scale demolition and ground disturbance that preceded the archaeological investigation, certain structural features were still visible on the ground surface. Plates 17a and 18a depict the remains of the Mullikin Street curb, also shown in the foreground of the 1896 photograph (Plate 16b), the C Street curb (Plate 17b), and a remnant of the limestone base of the school yard wall (Plate 18a).



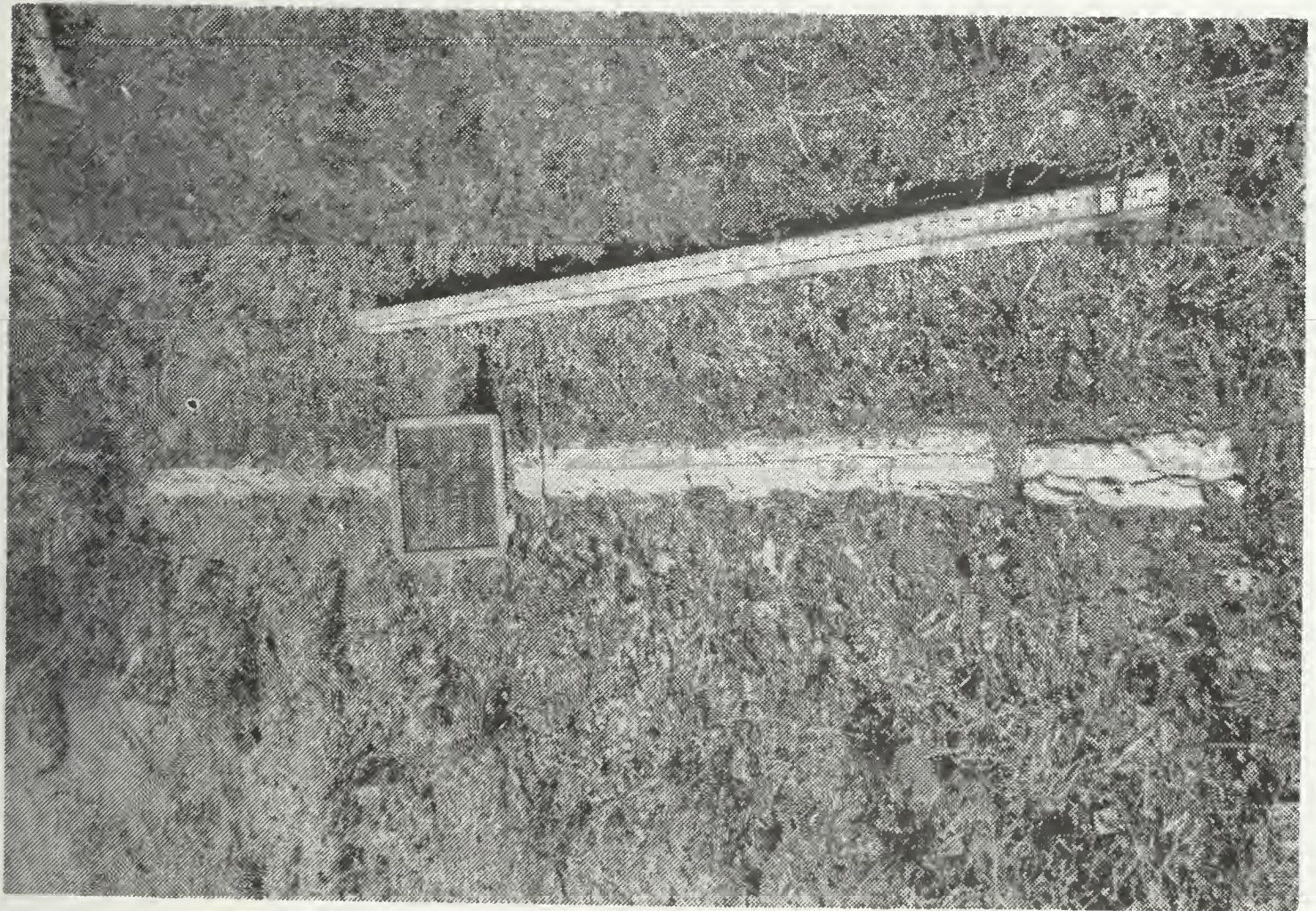


PLATE 17. A. Mullikin Street Curb at the Douglas School Site, 1980.

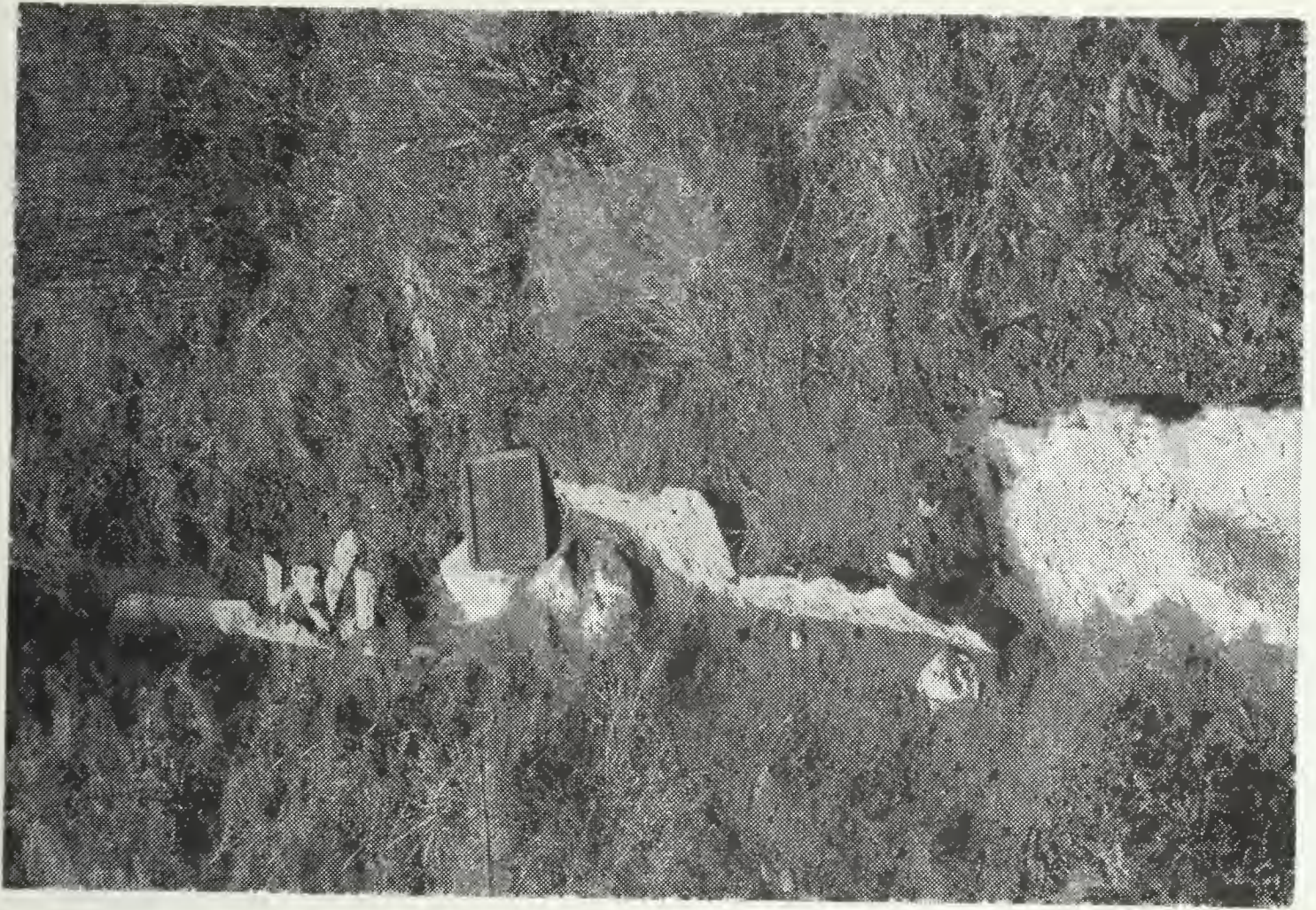


PLATE 17. B. C Street Curb at the Douglas School Site, 1980.





PLATE 18. A. Douglas School Yard Wall, 1980.

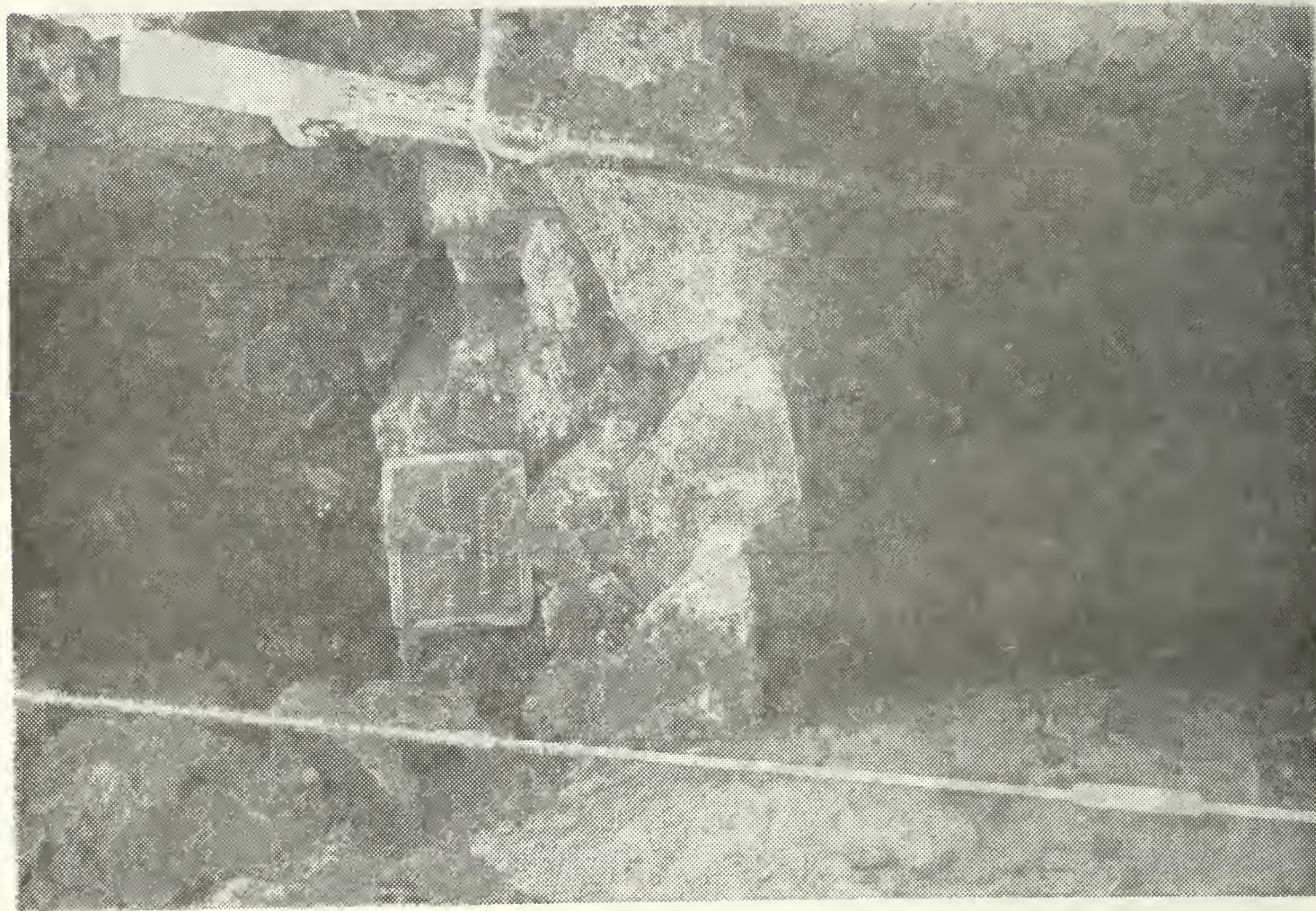


PLATE 18. B. Douglas School Foundation, 1980.



Based on the location of these features, three five-foot square test units were placed in strategic areas of the school to assess the condition of the buried structural remains. The hand excavation revealed that the surface consisted of a light layer of gravel over cinder and rubble fill. Cultural material from two of the units is of a wide variety, including ceramics, container glass, and miscellaneous types of nails, hardware and building material spanning the 20th century. However, initial attempts at excavation revealed that the gravel, cinder, and brick rubble deposits on the surface were impenetrable by hand excavation and so a backhoe was obtained to strip away the overburden.

Figure 16 shows a plan of Douglas School based on information obtained from the 1910 Sanborn Insurance map and the field investigations. The site plan shows placement of the test trenches and test units. Four trenches were excavated through the fill material. Trench 1 and Trench 2 successfully located intact structural remains of the Douglas School. Trench 3 and Trench 4 contained no intact architectural remains, though both trenches provided good control data for evaluation of Trenches 1 and 2. Because Trenches 3 and 4 illustrate the range of stratigraphy, they will be discussed before the description of the subsurface school remains.

Trench 3 was placed outside the hypothesized east wall of the Douglas School yard (Figure 16). The trench was excavated to a depth of 3.5 feet below surface. Beneath a thin layer of gravel and silt was a layer of dark cinder and limestone debris 1.5 feet thick. No other cultural material was noted in the cinder layer. Beneath this level was sandy silt that was excavated to a depth of 4 feet below surface. The trench was then augered to a depth of 9 feet below surface with little change in soil type. It is believed that the silt is the ground surface as it existed during use of the school.

Trench 4 was located inside the structure (Figure 16) and was excavated to a depth of 4.5 feet below surface. Beneath the thin gravel silt layer was cinder fill with brick fragments approximately 1.3 feet thick. Underlying the cinder layer was a silt level that extended to a depth of approximately 3 feet below surface. The silt graded into a thick rubble and cinder layer that could not be penetrated with the backhoe. A large chunk of ashlar was noted in the south wall. Fragments of container glass recovered from the rubble layer provide a broad temporal range of 1880 to present (Appendix A).

Test trenches 1 and 2 provide the best information about the series of fill layers and their relation to the intact school remains. Trench 2 was excavated to a depth of 9.5 feet below surface. Level A consisted of sandy loam with cultural material extending to about 2 feet below surface. Level B was dark cinder mixed with mortar, brick and limestone fragments extending to a depth of 5 feet below surface. Levels C, D, and E are layers of sandy silt with some cultural material including limestone and brick fragments. All of the levels in the trench slope upward from west to east, indicating much deeper deposition of all strata inside the school foundation as opposed to the depth of similar levels outside the school wall. At about 6 feet below surface the remnants of a burned door were found over an intact section of ashlar

foundation. Judging from the location of the trench (Figure 16), this could be the back entrance door to the school. At approximately 9 feet below surface the bottom of the foundation wall was reached and the sandy silt ended at a sterile sand layer.

It appears then, based on Trenches 2, 3, and 4, that a silt layer with brick and limestone fragments overlays school rubble and intact portions of the building. On top of the sandy silt is a layer of cinder fill that appears to be widespread unevenly throughout the site. The varying thicknesses of all of the levels except the silt and gravel layer on top suggests that the uneven ground surface, caused by deep demolition of the school remains and movement of the underlying silty sand, was covered and leveled by a layer of dark cinder.

Trench 1 contained the best information with which to interpret the original school basement and foundation, and the episodes of demolition and filling that occurred after 1955. Trench 1 was excavated through the cinder and brick rubble layers to a depth of 3 feet below surface where the top of the school foundation was encountered. The trench was then excavated by hand with the exception of a nine foot-long southern extension of the trench, which was backhoe excavated to a depth of 9 feet below surface without recovering evidence of intact architectural remains.

Figure 18 depicts the profile of fill, demolition, and structural layers in Trench 1. Level A, consisting of dark cinder fill is located directly beneath a thin gravel layer and on top of the demolition level. Artifactual material is scarce and, with a few exceptions, only of very limited help in dating this layer. A fragment of bottle glass obtained from hand excavation in Test Unit 1 that dates from 1933 to 1964, as well as a pull tab, aluminum foil, and styrofoam, indicates deposition after initial demolition in the mid-1950s.

Beneath the cinder layer is brick and limestone rubble overlaying the foundation. The rubble consists of single or fragmented brick and limestone debris. There were no large mortared sections of the school in the rubble layer, indicating that the rubble layer was debris left over when the bulk of the school remains were carried off probably to be used as fill elsewhere. Like the cinder layer above, the rubble layer had few artifacts to confidently date the period of demolition. One exception was a bottle glass base with a 1954 maker's mark, the last year that Douglas School is found on available maps of the area.

Directly beneath the rubble layer an intact portion of the basement floor and foundation wall was uncovered (Plate 18b). The foundation was of mortared ashlar limestone 2.8 feet wide and 6 feet high. The base of the foundation flared out on either side to provide a firm base. It was laid on top of a prepared base of limestone ballast that overlaid sterile sandy silt. An auger test placed outside the school foundation wall to a depth of 11.6 feet below surface revealed that the sandy silt continued well below the base of the foundation, which marks maximum depth of cultural material. The intact wall continued through the east and west walls of the trench for an undetermined length. The sand layers excavated north (outside) of the wall contained limestone debris, mortar, cut



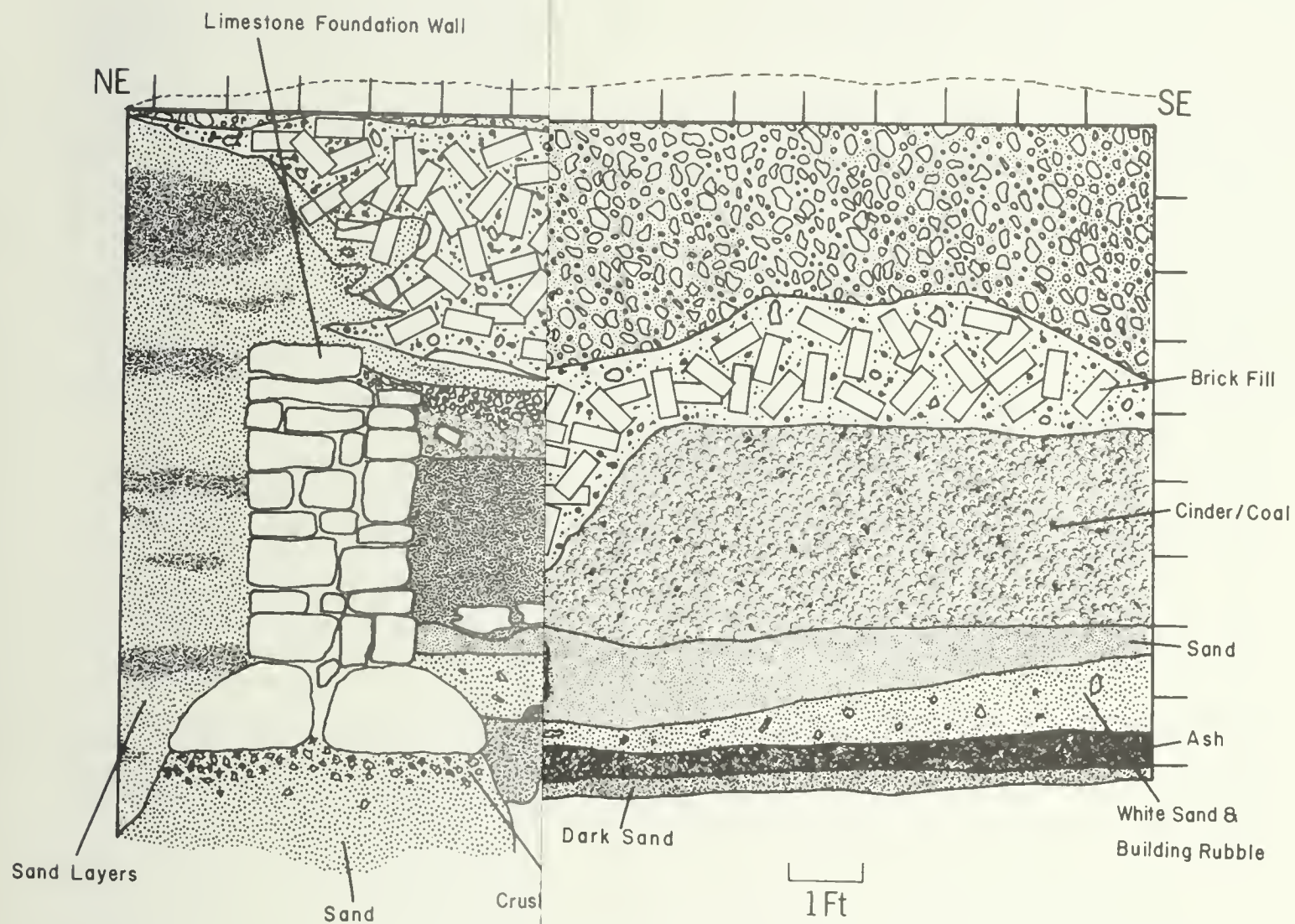


FIGURE 18. Douglas School, North-South Trench 1, East Wall Profile.

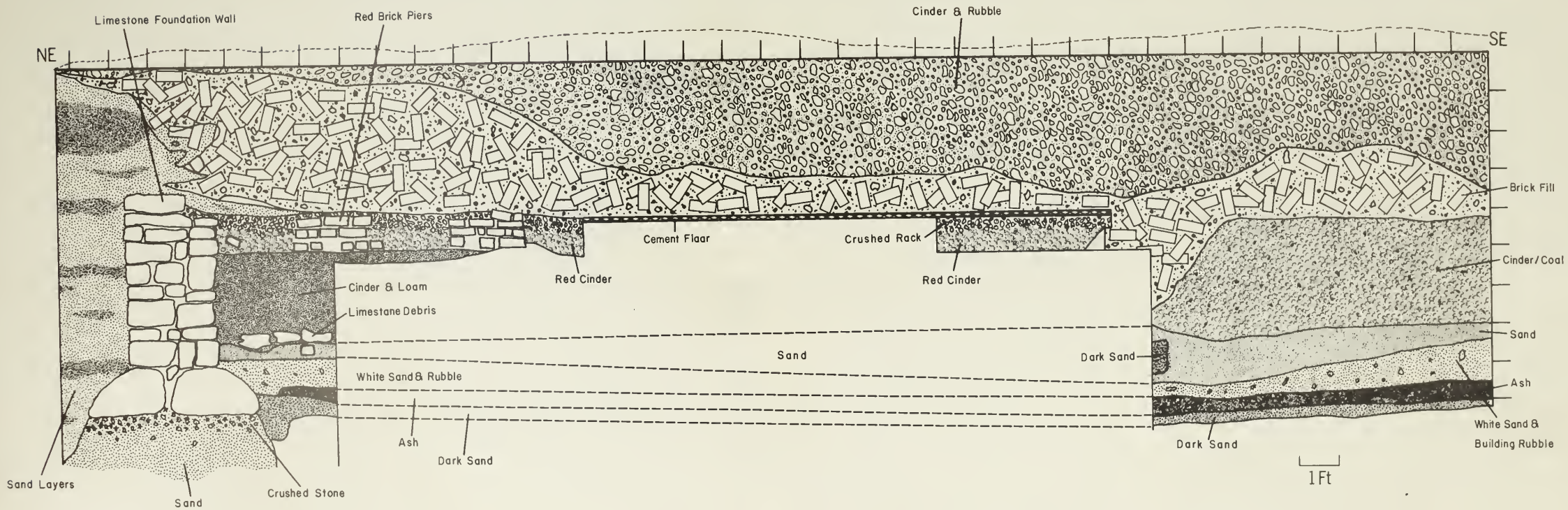


FIGURE 18. Douglas School, North-South Trench 1, East Wall Profile.



nails, burnt ceramics, container glass, wood and nails. Though much of this cultural material was too burned to allow easy dating, the presence of cut nails and the absence of wire nails, which became popular around 1860, suggest that this level contains remains from the original Douglas School, which was constructed some time after 1855 and destroyed by fire in the early 1870s. The material was undoubtedly mixed with the silty sand during clean-up activities following the fire and later excavation of the basement of the second Douglas School.

The original excavation for the foundation was extensive because of the need to raise the first floor to high grade as well as the need for a firm base on which to construct the large superstructure of the school. Plate 16b, showing the tornado damage, permits a fairly accurate estimate of the height of the foundation and basement. The Mullikin Avenue street curb (Plates 16b and 17a) provides the common reference point between the 1896 photograph and 1980 field investigations. Based on the height of the front entrance way and hall doorway (Plate 16b), it appears that the top of the foundation marks the elevation of the first floor and basement ceiling. An estimate of the height of this floor above the curb in the foreground would be about seven feet. The depth of the foundation below the curb is 9 feet and the depth of the basement is 4 feet, which gives a total foundation height of 16 feet with the height of the basement about 11 feet. This compares favorably with the height of the first floor (Plate 16b), which appears to be about 11 or 12 feet tall.

The fill needed to raise the level of the basement floor has been well documented by the excavations in Trench 1. The basement floor is poured concrete .1 feet thick that lies directly over crushed limestone and red cinder. In two locations, mortared red brick piers two feet wide and one foot high and pieces of burnt lumber were uncovered below the concrete floor (Figure 18). These piers probably served as anchors for floor joists on the pre-1896 school until the floor was replaced by the concrete version at the turn of the century. Two pieces of window glass recovered in the red cinder layer date from 1880 to present. The date after which these artifacts could occur is 1880, which indicates that the red cinder was not part of the basement floor substrata when the brick pier and floor joists that supported the wooden floor in the second school were built in the early 1870s. At 5 feet below surface, the red cinder and brick pier level ends and a thick dark loamy cinder layer extends from the red cinder to 7.5 feet below surface. Though this layer had very little cultural material, one diagnostic artifact, an amber bottle with a true blob top embossed "Green and Clark Missouri Cider" dates between 1873 and 1885. When the post-1880 date for the layer above is taken into account, this narrows the date range of the level to between 1873 and 1880. Since the second school had been built before 1875 (Reavis 1876:73), the date of this cinder fill can be confidently placed at between 1873 and 1875.

Lying at the bottom of the cinder layer are pieces of limestone and brick on a sand layer that probably dates to the period after foundation construction and before the basement was filled for the basement floor (Figure 18). Most likely this layer represents cleanup activity by the construction crew who saw the basement as a convenient location for the disposal of foundation construction debris. Beneath this level is a

layer of ash with burnt glass, nails, wood, and a burnt sherd of salt-glazed stoneware. This level overlays the foundation wall builders' trench (Figure 18), and represents in situ burning rather than filling. Possibly it represents another stage of construction cleanup. Feature 1, located on the outside of the foundation wall (Plate 19a), is probably related to the same burning episode. The feature consists of ash, burnt wood, nails, and limestone debris, and extends beneath the limestone base on the north side.

The remains of the Douglas School provide a very informative view of architectural details not available from a study of historic photographs or documentary data. The sequence of construction levels, fill layers, and the modification of the basement floor are important indicators of the adaptation to the constraints of the high grade policy and sandy soil during the late 19th century. The need to anchor the foundation firmly and to raise the first floor above possible flood level on a building of this size resulted in a massive foundation incorporating layers of cinder or other fill and a basement. Other large structures that may be investigated in the future should be examined for information on construction and renovation dates that might be recovered from the basement fill.

The Douglas School investigation recovered intact deposits buried deeply under cinder fill and rubble. While the testing study uncovered remains that contributed to a better understanding of the site, it is not believed that additional investigations could recover anything of substantive value to warrant further intensive study of the school remains. In addition, the site is not going to be impacted by the railroad relocation and construction, and so preservation of the school remains appears to be the most prudent alternative.

#### THE LEAP YEAR SITE (S-74)

The Leap Year site is located on the island (Figure 3a), and is bounded by West Broadway, Brooklyn Avenue, and the tracks of the Terminal Railroad Association (Figure 19). The site was located during the archival research by the Illinois State University reconnaissance investigation. The Leap Year site is a group of about a dozen structures labelled "negro shanties" on a 1910 Sanborn Insurance Company map. The structures have since been demolished and Brooklyn Avenue closed, and a maintenance road for the Terminal Railroad Association has been placed over part of the site.

The black shanty houses were one- and two-story frame buildings with composition or wood shingle roofs or both. The houses are linearly arranged parallel to Broadway Avenue. Several outbuildings or abandoned dwellings are located at the west end of the shanty row (Figure 19).

The structures are located off the Broadway Avenue thoroughfare. The commercially valuable property fronting Broadway Avenue was privately owned, but the shantytown is located on Terminal Railroad Association or Wiggins Ferry Company property. It was quite often the case that the



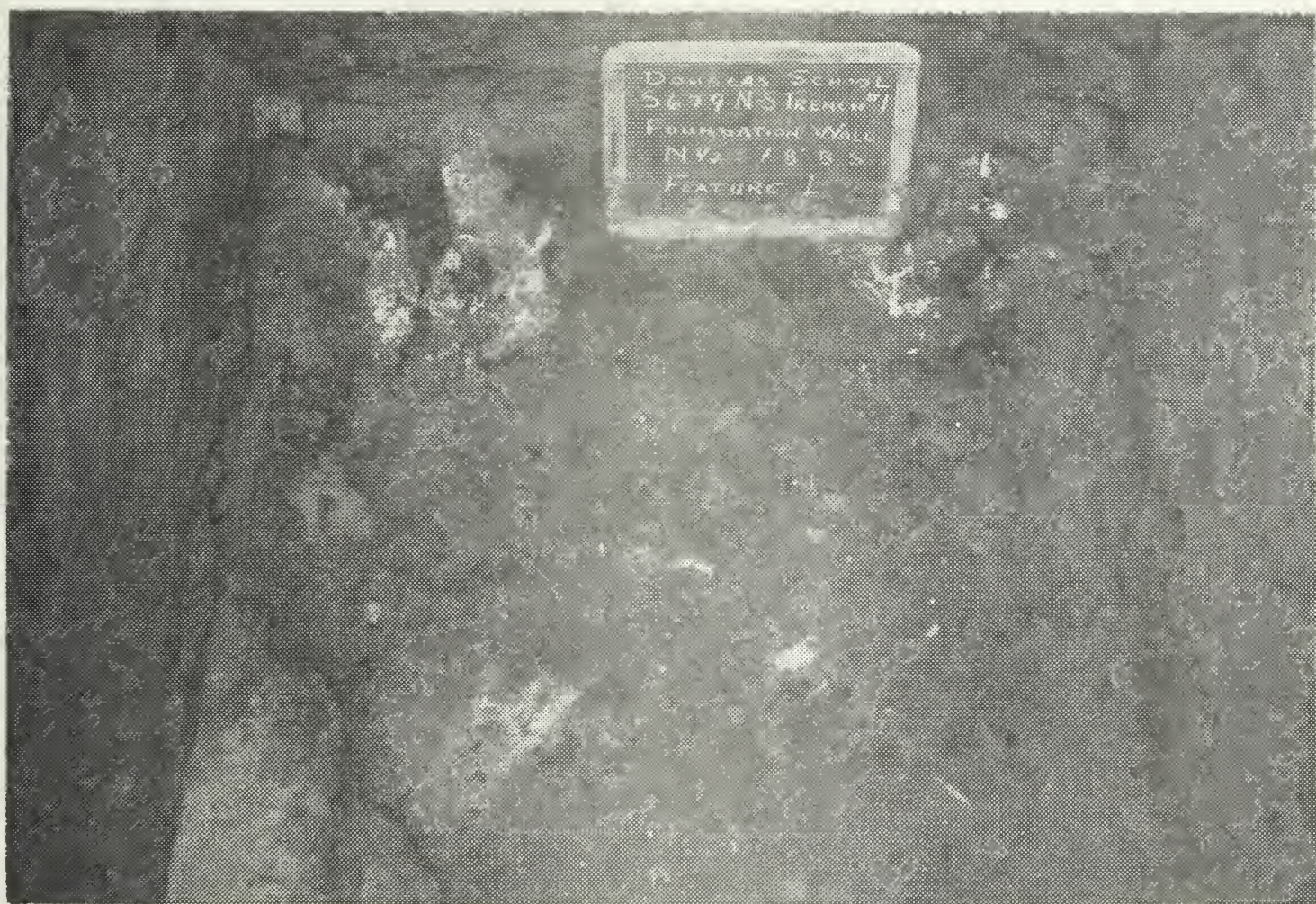


PLATE 19. A. Feature 1, Douglas School Excavations, 1980.

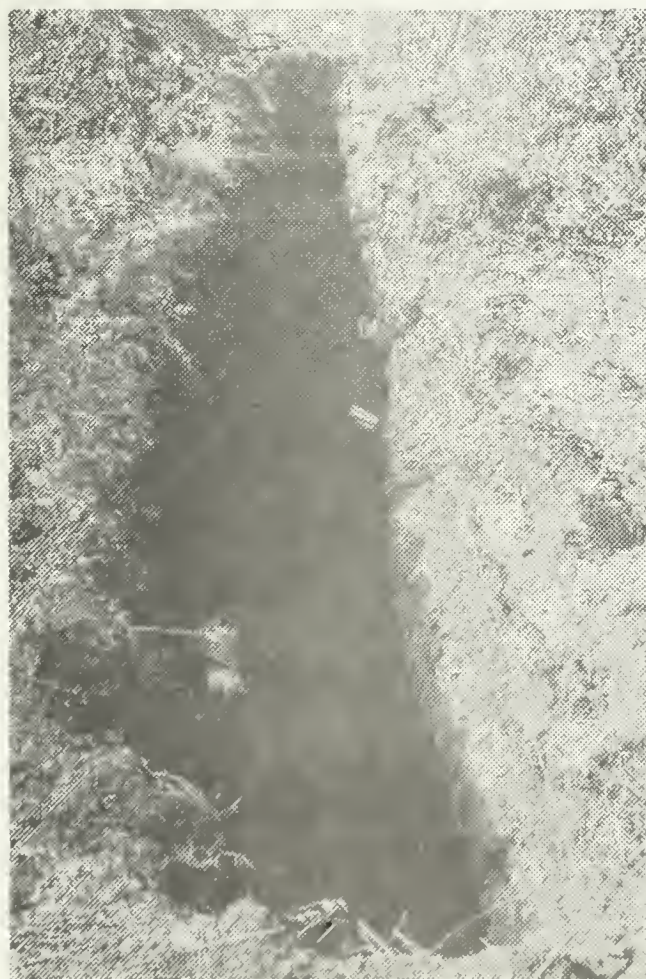


PLATE 19. B. View of Trench, Leap Year Site, 1980.



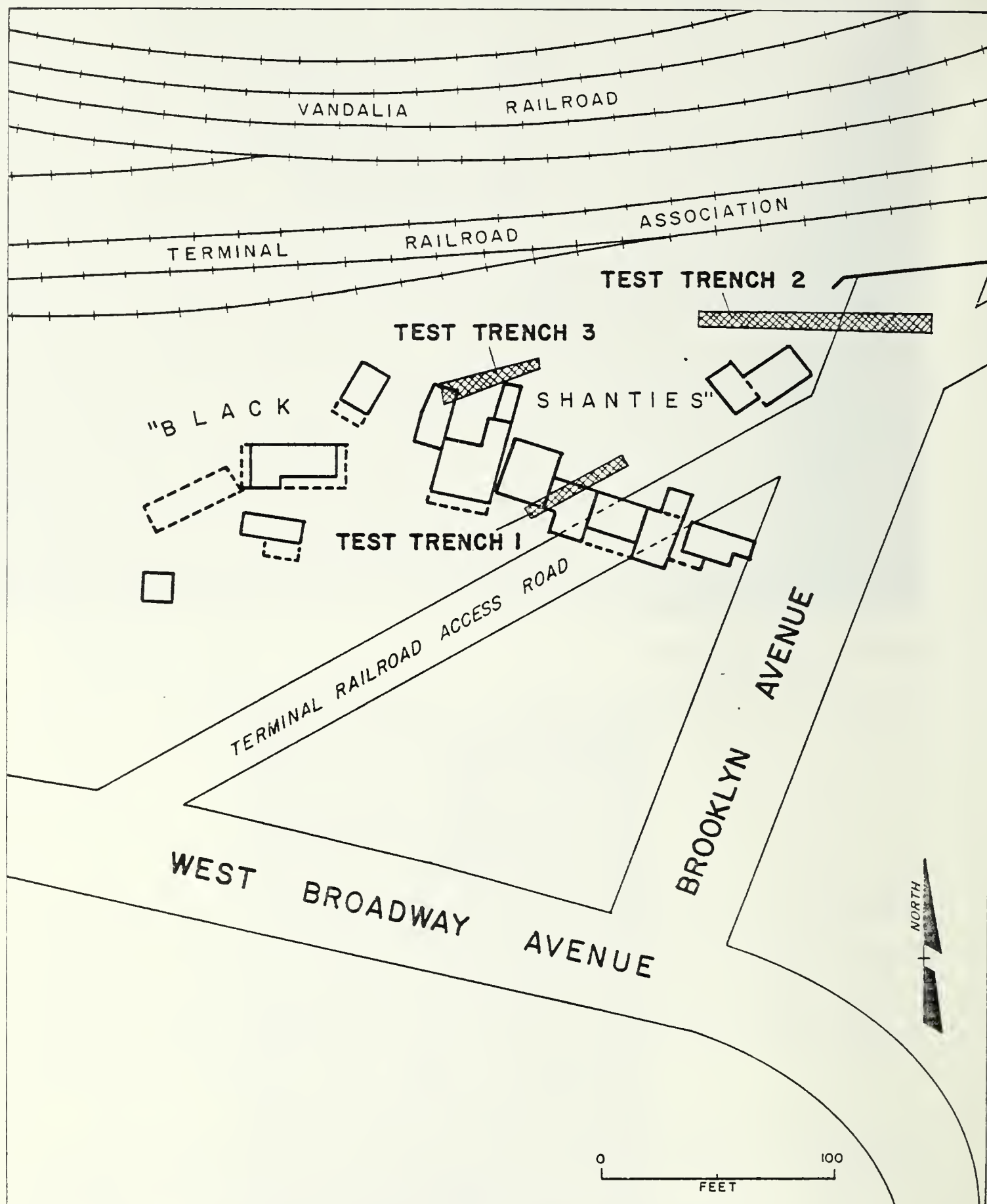


FIGURE 19. Site Plan of the Leap Year Site, Based on the 1910 Sanborn Insurance Map.



Wiggins Ferry had parcels of real estate that, because of the extensive railroad network and commercial development along road frontage, were isolated and not particularly desirable for either business or residential development. These were the kinds of areas on which many shantytowns grew, since the property could be rented cheaply and housing constructed with salvaged material.

Shantytowns like the Leap Year site were ubiquitous to the St. Louis metro area during many phases of its history. Paradoxically, they seem to be related to both times of prosperity and periods of depression. During economically healthy periods in East St. Louis history, population expanded in response to growth of industry and jobs, and the subsequent housing squeeze forced many to locate to marginal areas in the city and to construct makeshift shantytowns (Rudwick 1964). During periods of depression and unemployment, residents again relocated to or established shantytowns to take advantage of cheap housing and low rent (Towey 1980:4-11). A more detailed discussion of the shantytown phenomenon will be included in the Kerr Island site discussion.

#### Testing at the Leap Year Site

There is a dearth of information about the Leap Year site other than the documentation on the 1910 Sanborn Insurance map. The 1928 aerial photo of the waterfront indicates that the structures were gone by this date. It is possible that the shantytown burned during the devastation of the 1917 race riot, since many black homes were burned in the downtown area nearby (Rudwick 1964:42,43). However this cannot be confirmed either from published books on the riot, newspaper accounts, or oral interviews. As a largely unknown entity, the Leap Year site was afforded deep testing to locate and assess the remains of this early 20th-century settlement.

Examination of maps of the area and preliminary investigation revealed that the site location has been subject to some significant ground surface alteration. At some time between 1928 and 1934, the Terminal Railroad Association maintenance road was placed between Broadway and Missouri Avenues (Figure 19). Later, between 1934 and 1958, the entire area was covered with approximately five feet of fill, raising the maintenance road and burying Brooklyn Avenue and the site. Because of the amount of fill material covering the occupation layer, a backhoe was utilized to reach the cultural deposits.

Two tests (Trenches 1 and 3) were placed in locations believed to offer a high probability of containing recognizable house remains. Trench 2 was placed at the location of Brooklyn Avenue to assure good control on depth of fill. Figure 19 is a composite map showing the 1910 layout of the Leap Year site, the location of old Brooklyn Avenue, the TRRA maintenance road, and the location of the test trenches.

Test trench 1 was placed to bisect the middle of the house cluster. The trench was excavated to a depth of eleven feet below surface. At the surface was a layer of sod on top of limestone and gravel in a sandy loam that extended to a depth of .5 feet below surface. This was followed by a deep cinder and clinker layer approximately two feet thick. Below

the cinder/clinker stratum was a layer of sandy loam extending to a depth of three feet below surface. No artifacts were noted in these fill layers predating the mid-20th century.

Level F consisted of a one foot-deep level of waste clinker with large amounts of artifactual material including safety glass, bottle glass, red brick, paving stones, mortar, coal, asphalt shingles, and ceramics, mainly ironstone, whiteware, earthenwares and stonewares. Artifacts recovered in situ by hand excavation include ironstone, bottle glass, safety glass, and wire nails that collectively date to the late 19th and early 20th centuries (Appendix A). The cultural material in this level was in a cinder matrix almost totally devoid of any natural organic soil. This caused considerable problems in extending the trench below this level because the cinder matrix could not support its weight and material was constantly falling into the levels below. For this reason, much of the artifact collection is given a general provenience designation that includes Levels F and G where the backhoe excavation of Level G was thought to be contaminated with material from Level F.

Extending approximately 1.6 feet below Level F is Level G, consisting of ash and cinder in a loam matrix. In addition to the artifactual material that is grouped with Level F (Appendix A), some cultural material was recovered in situ by hand excavation. The material consists of ironstone, earthenware, bottle glass, a spoon, and window glass, and can be tentatively dated to the late 19th and early 20th centuries.

Much tighter temporal placement of these two levels is possible from the general collection of both levels. The recovered ceramics span a wide range of types including ironstone, stoneware, yellowware, and whiteware. The container glass, however, has a mode of 1929 to 1935, indicating that the levels are a mixture that include artifacts post-dating the occupation of the Leap Year site.

Below Level G were several more distinct strata including Level H (5.7 to 7.4 feet below surface), sandy clay with gray clay, mottling; Level I (7.4 to 7.6 feet below surface) gray sandy clay, Level K (7.6 to 8.6 feet below surface) grey clay with tan clay mottling, and Level L (8.6 to 11 feet below surface), tan clay with gray mottling. Level K produced a fragment of agateware doorknob that dates to around the last quarter of the 19th century. No artifactual material was recovered below Level K (8.6 feet below surface).

The results of the Trench 1 excavations suggest that the area has been subject to several episodes of filling to the extent that the early 20th century occupation level is obscured somewhere in the several fill levels. So much of the fill material is typical for early 20th century sites that it is difficult even to distinguish the exact fill level that contains the occupation debris. However, the lack of cultural material below Level G (5.7 feet below surface) and the occurrence of the late 19th-century agateware doorknob in Level K, as well as the preponderance of structural material in Level F (2.9 feet below surface), would strongly suggest that the location of the Leap Year site is nestled somewhere within Level F or G.



Test Trench 2, placed approximately 50 feet northwest of Trench 1 (Figure 19), was excavated to a depth of 10 feet. The nature and sequence of strata and cultural material was almost identical to that of Trench 1. The top level consisted of .4 feet of sod followed by .4 feet of gravel, underlain by medium brown sandy clay extending from .8 to 4.6 feet below surface. Artifacts were recovered from the medium brown sandy clay (Level C) including ironstone, earthenware, bottle glass, and structural material (Appendix A).

Underlying Level C was a stratum consisting of about one foot of clay with cinder and ash. Level D contained some brick fragments and amorphous metal pieces. Below Level D was a one foot layer of dark gray clay with lenses of clinker, coal, and ash. This layer, Level E, contained ironstone, earthenware, and container glass dating to before 1870 and also bottle glass with a range date of 1880 to present (Appendix A).

Level F, dark gray clay with clinkers, coal, and cinder, extended from 6.4 feet to 8.4 feet below surface. Characteristic artifacts from this level include ironstone, shoe parts, and bottle glass dating from 1867 to present. Though there is some difference in color, this level is similar in nature and cultural material to Level E.

A general collection of artifacts with uncertain provenience contained ironstone, whiteware, porcelain, earthenware, yellowware, and container glass dating broadly from the mid-19th century to the present. Like Trench 1, Trench 2 is generally suggestive of frequent episodes of filling, and incorporated artifacts from predominantly the late 19th to early 20th century, as well as a small fraction of artifacts from the mid-19th century. No evidence of the shantytown occupation layer was recovered, and it is probable that it is mixed with fill material brought in soon after demolition.

The last test trench, Trench 3, was placed over the edge of old Brooklyn Avenue. Trench 3 provided similar results as Trenches 1 and 2. The stratigraphy of Trench 3 consisted of a sod layer (Level A) approximately 5 inches below surface, gravel (Level B) 5 to 1.0 feet below surface, clinker and cinder fill (Level C) 1.0 to 3 feet below surface, cinder and sandy loam (Level D) 3 to 5.5 feet below surface, and clay (Level E) 5.5 to 6.5 feet below surface (Figure 20, Plate 19b). The west end of Brooklyn Avenue was located at the interface of Levels D and E, 4.5 to 5.5 feet below surface. The road is constructed of limestone ballast (Plate 20a). A large timber is buried at this level on the west shoulder of the road.

Assuming that the buried Brooklyn Avenue marks the minimum depth of the early 20th century land surface, the Leap Year site would then be buried under the thick cinder layers revealed in all three test trenches. Artifactual remains spanning the late 19th to the 20th century were located in the cinder layers, though much of this is fill material and cannot be assumed to represent in situ deposition. The occupation layer would probably be thin in comparison to the fill layers, and structural evidence of the shanties easily erased by demolition and land filling. It appears that the research potential of the Leap Year site has been impacted by demolition and landfilling. Th Leap Year site fails to meet



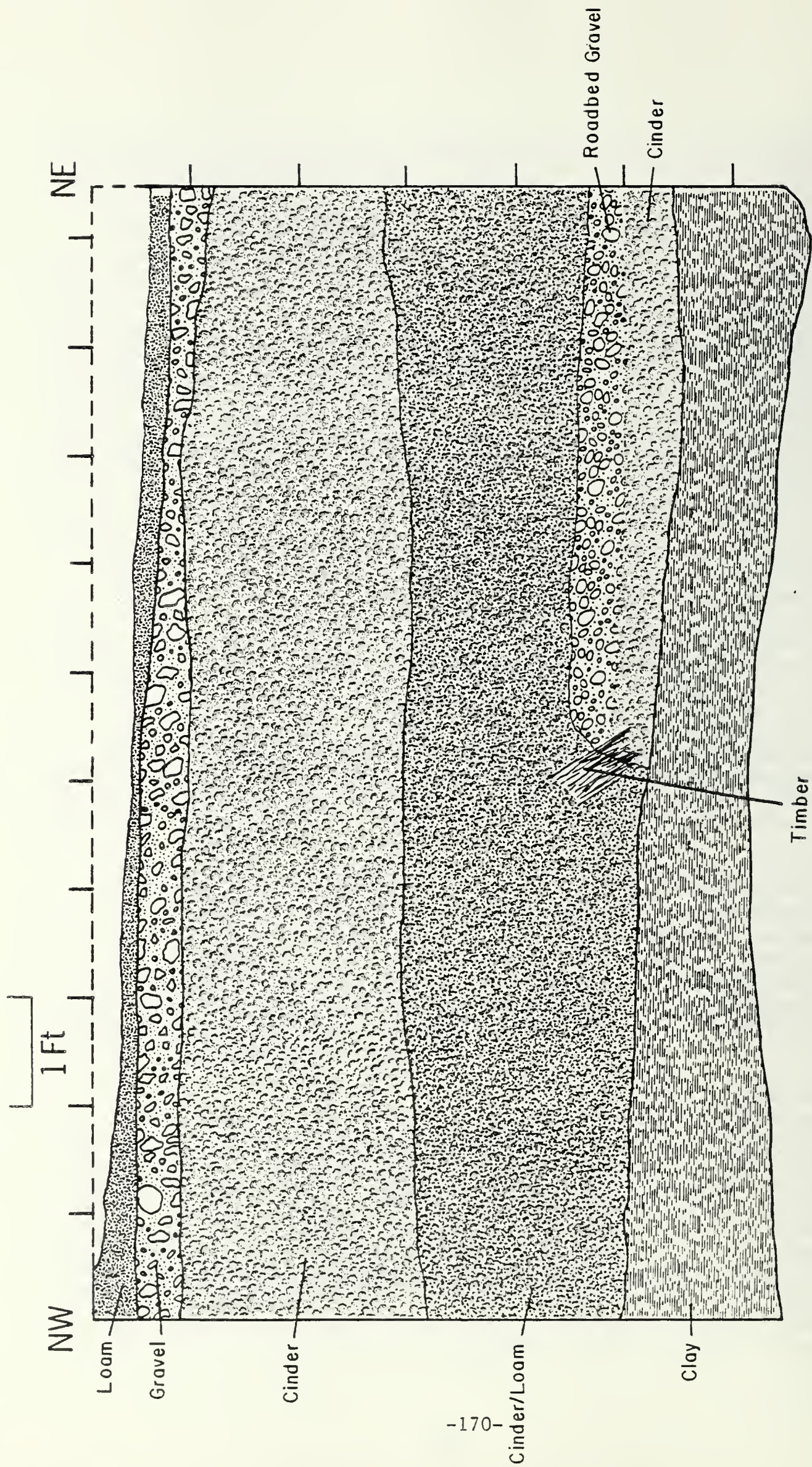


FIGURE 20. Leap Year Site, Trench 2, North Wall Profile.





PLATE 20. A. Brooklyn Avenue Road Ballast, Leap Year Site, 1980.



PLATE 20. B. Bonnie's Tap, Looking Southwest, 1980.



the minimum criteria for nomination to the National Register of Historic Places and no further investigation is recommended.

#### BONNIE'S TAP (S-675)

Bonnie's Tap is a tavern and restaurant located at the corner of Front Street and Broadway Avenue (Figure 3b). The establishment is still in operation, serving mainly the local railroad and trucking workforce on the island. A local informant stated that the tavern was constructed ten years before the erection of Eads Bridge in 1874, and an Illinois State University architectural historian believes that the building dates from the 1860s (Smith and Lange 1980:105). The tavern appears on maps after 1881 (Figure 7); however, the 1860 date of construction cannot be confirmed through map or documentary data.

The tavern structure has been altered through time, especially the interior. Local rumor states that the structure was originally two stories, but that the upper story was blown away during the tornado of 1896. However, this rumor is unsubstantiated as no historic photographs of the tornado damage to the building are available like they are for other structures on the island.

Today, Bonnie's Tap is a one-story, soft brick building, with three bays, a stepped flat roof, and star-shaped wall anchors along its sides (Plate 20b). Above the bays on the front facade is an interrupted rowlock. Problems in obtaining right-of-access prevented a subsurface investigation next to the building. However, it appears that the coursed rubble foundation extends deep underground, possibly as far as the original island surface.

The tavern is topped with asphalt composition roofing. On the roof is a functioning, water-cooled air conditioner dating to the early 20th century. Behind the main body of the tavern is a recent concrete block addition last used as a private residence. The 1909 East Side Levee map (Figure 7) depicts a rear addition as well as a side addition near the rear of the original structure. A 1919 Terminal Railroad Association valuation map depicts a one story frame addition where the cinder block addition is now located. It probably served as a storage room or residence.

Despite the early air conditioning unit and relative antiquity of the tavern, the structure has been so severely modified (the interior, front facade, and roof) that, architecturally, it fails to meet the criteria for inclusion in the National Register of Historic Places. Therefore, no further investigation of the tavern itself is necessary.

#### Testing at Bonnie's Tap

The archaeological testing at Bonnie's Tap was aimed toward recovering artifactual material or activity areas adjacent to the structure



that might have originated or been related to the operation of the tavern. Because of the 20th century construction at the rear of the structure, test units were not excavated behind the tavern where features related to the site might logically have existed because of the narrowness of the lot. It is conceivable that such archaeological material does exist below the present Bonnie's Tap addition; however, this area was unavailable for investigation.

Two hand excavated, five foot-square test units were placed adjacent to the tavern within ten feet of the east side of the building (Figure 21). The tests could not be placed nearer the structure because of difficulties concerning right-of-access with the tavern owner. The problem was circumvented by excavating outside the property line, which was within five feet of the structure.

The two test pits were excavated to depths of 10'10" and 8'10" below ground surface. Test Pit 1, which was excavated 10'10" deep, was augered to a depth of 15 feet, and Test Pit 2 (8'10" deep) was augered to a depth of 13 feet. All of the tests were excavated to sterile silt.

Test Unit 1 was placed near the rear of the original structure at the location of the side addition shown on the 1909 map (Figure 7) and in front of a carpenter shop/warehouse that existed on the lot around 1910 (Figure 21). Figure 22 depicts the stratigraphy of Unit 1 as seen in the north profile. The top layer (Level A), consisted of a heavy rubble layer mixed with sandy loam and ash extending to 3.5 feet below surface. The rubble consists of stone, brick, and metal debris with datable artifacts consisting of a plastic bread wrapper, amber beer bottle fragments, and two container glass fragments dating between 1933 and 1964. Local informants state that this layer was placed over the area within the last five years to provide better drainage.

Extending below Level A was a layer of yellow clay and cinder with brick fragments extending from 3.5 to 4 feet below surface. Artifactual material in Level B included brick, plaster, tar paper, aluminum foil, a plastic straw, and pieces of brown paper suggesting a post-1950 date of deposition for this rubble level.

Level B was followed by dark cinder and sandy loam extending from 4 feet to 5.7 feet below surface. Cultural material from Level C included window glass, asphalt tile, wire, amorphous metal objects, bone, and a fragment of bottle glass with a maker's mark dating from 1929 to 1954. The last artifact provides the tightest bracket within which Level C can be dated; that is, after the first quarter of the 19th century.

Immediately beneath Level C was the first apparent intact occupation level, consisting of a brick floor, designated Feature 1, at approximately 5.7 feet below surface (Figure 22). The brick feature extends out of the north wall approximately one foot into the unit. The brick floor is dry laid in a pattern identical to the brick floor found in Unit 2 and depicted in Plate 21a. Below the brick floor is silty sand with cinder and ash extending to a depth of about 6.2 feet below surface. Artifactual material included cut nails, asphalt tile, a wooden comb fragment, and ceramics that range in date from around the second quarter

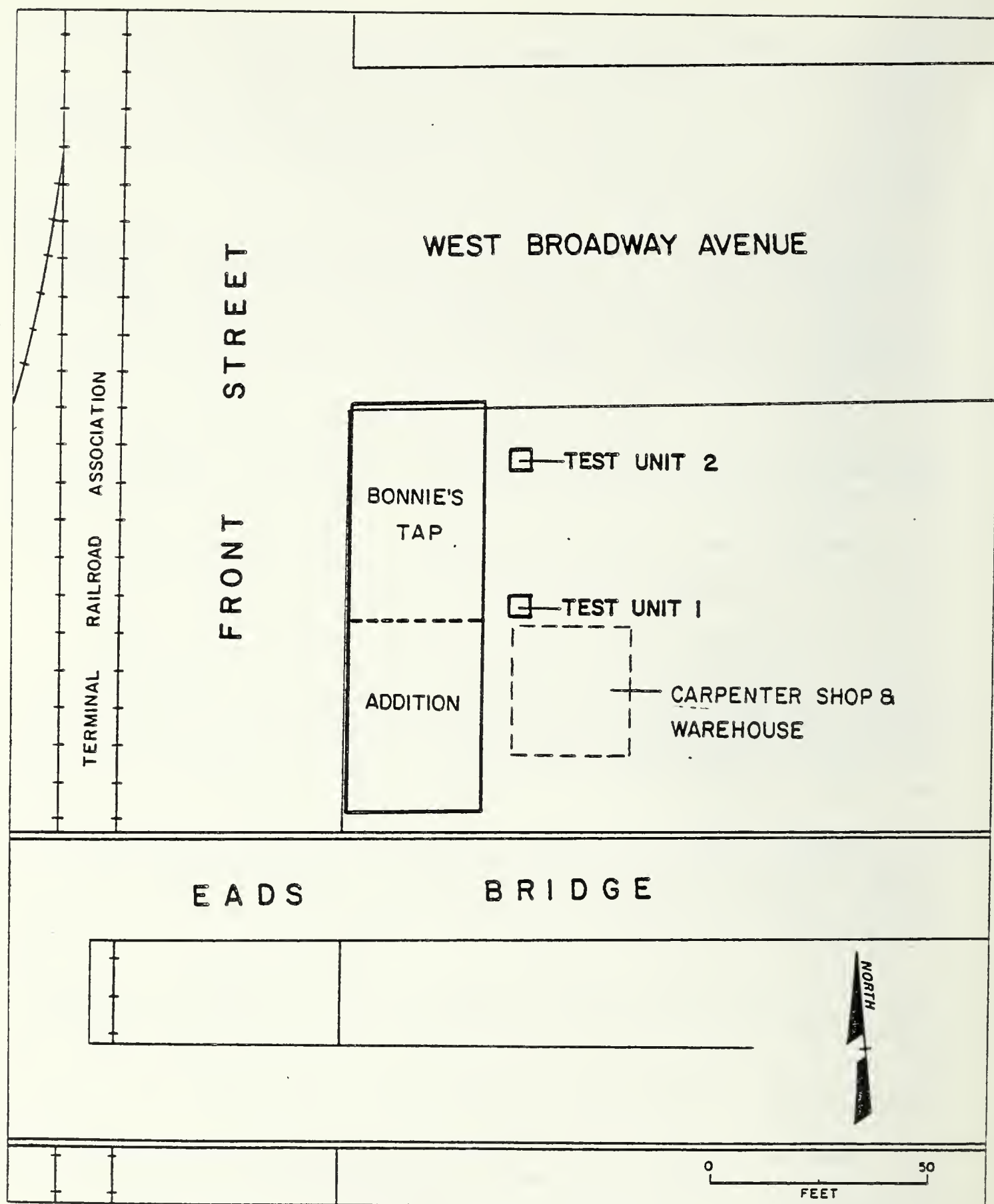


FIGURE 21. Bonnie's Tap Site Plan, Based on the 1910 Sanborn Insurance Map.



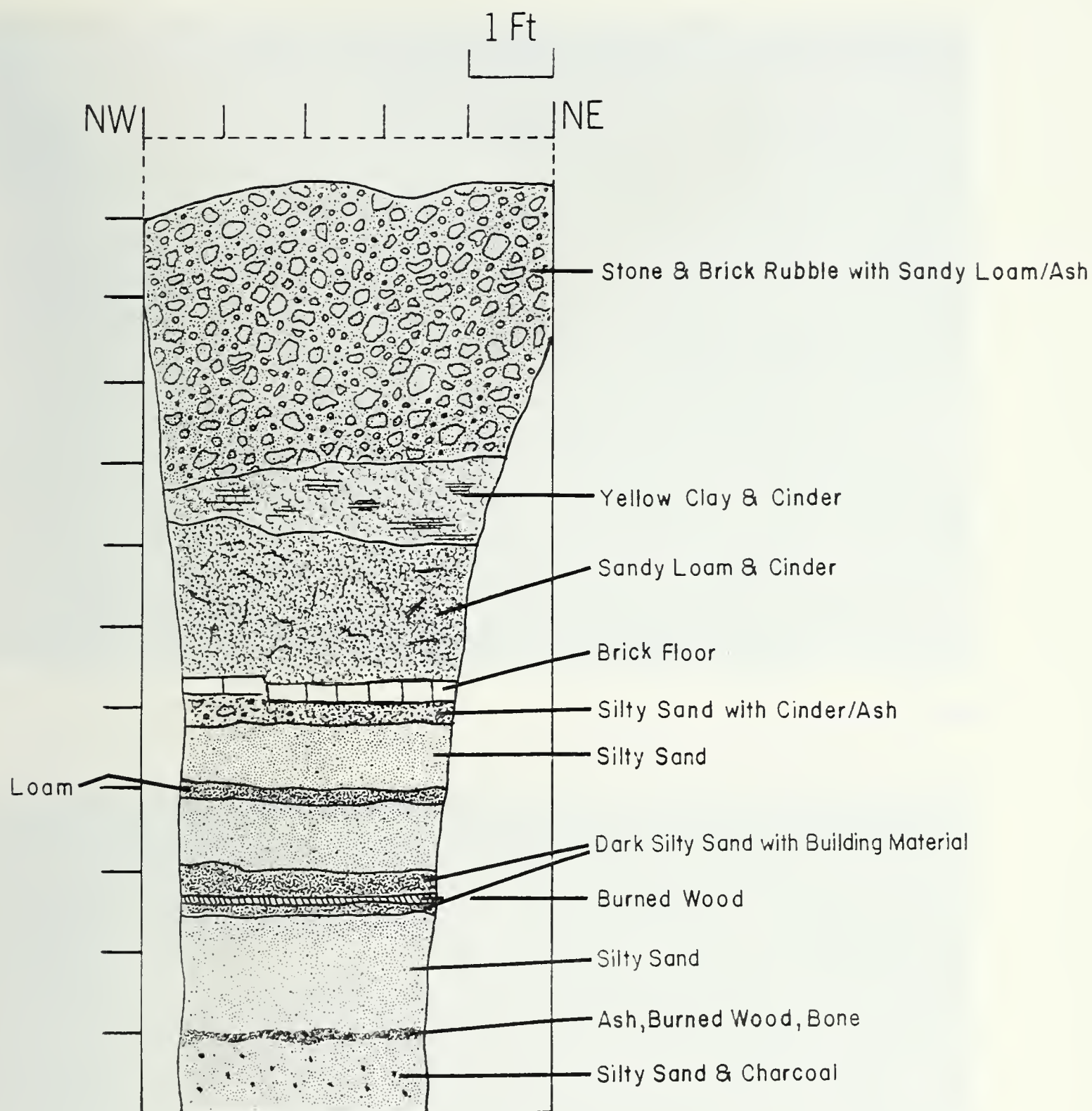


FIGURE 22. Bonnie's Tap, Test Unit 1, North Wall Profile.



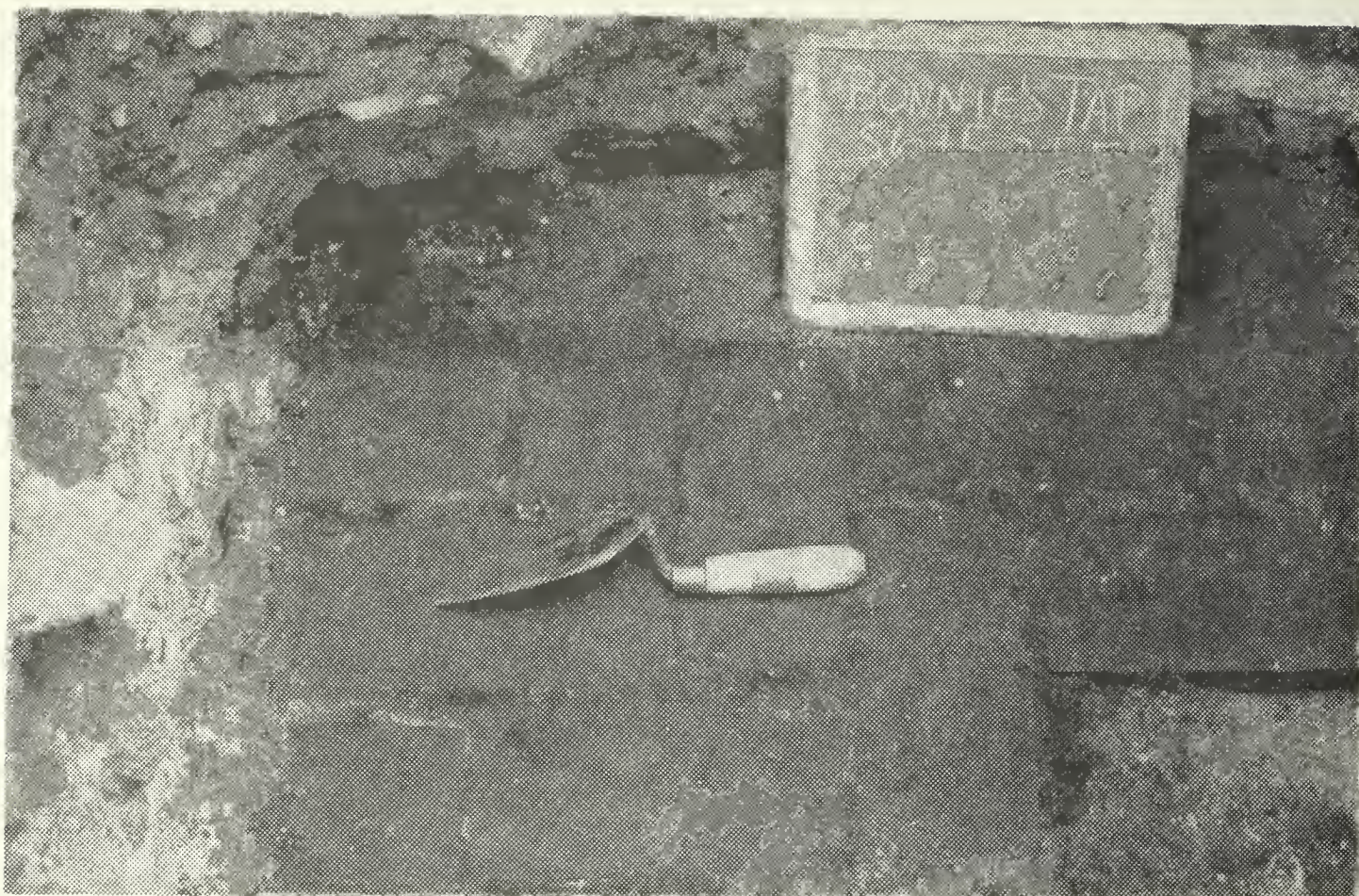


PLATE 21. A. Brick Floor Feature in Unit 2, Bonnie's Tap Excavations, 1980.

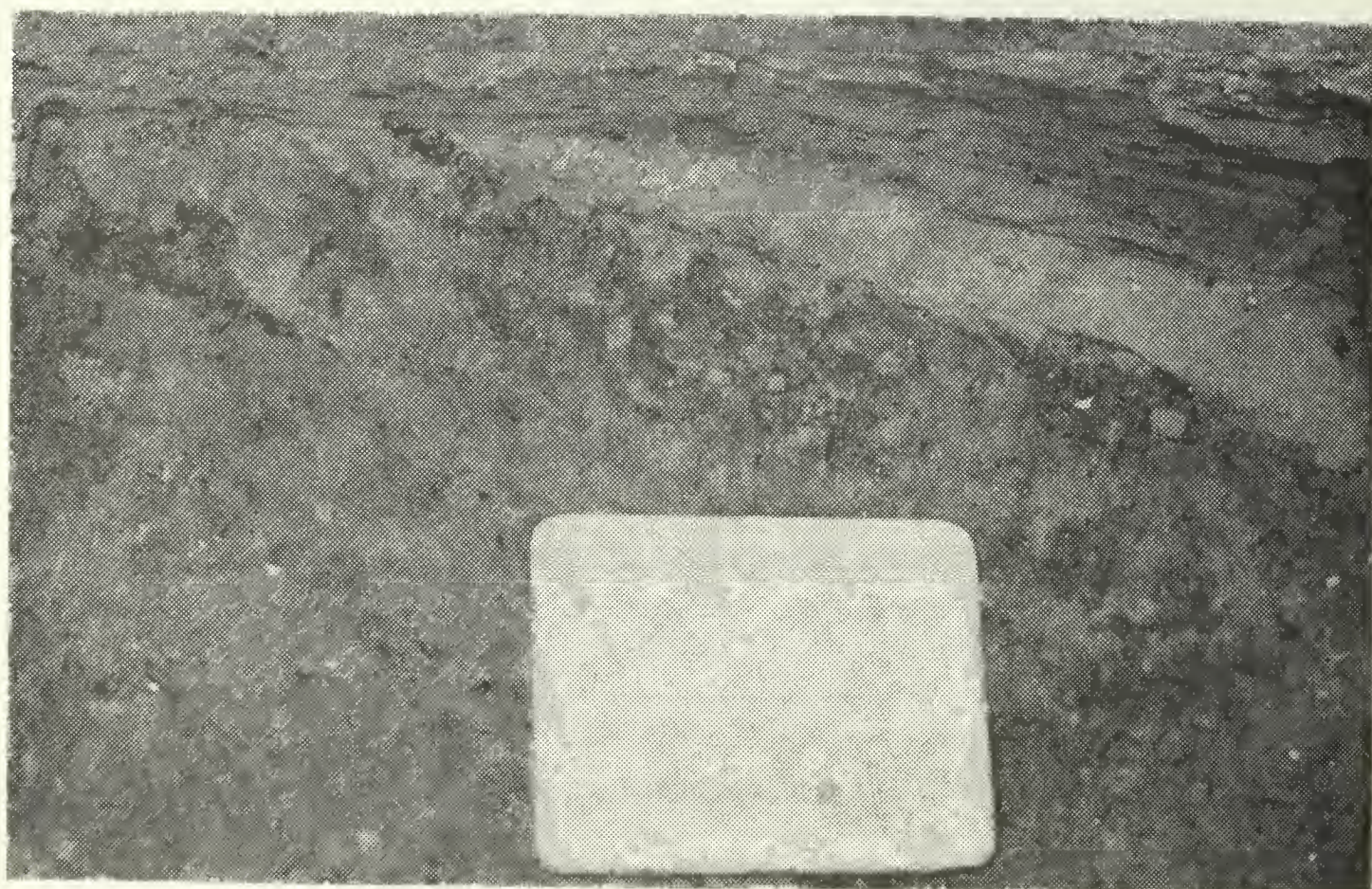


PLATE 21. B. Feature 4, Unit 1, Bonnie's Tap Excavations, 1980.



of the 19th century to the late 19th century. Bottle glass recovered in Level D provides a much tighter range of 1880 to 1917 (Appendix A).

The silty sand with cinder and ash graded into light colored silty sand that extended from 6.2 to 6.4 feet below surface. Ceramic material recovered from Level E had very wide range dates with the exception of pearlware and annular yellowware, which suggest a 19th century date of deposition. A much tighter temporal assignment can be derived from the occurrence of cut nails (probably mid- to late 19th century) and bottle glass post-dating 1880.

A lens of dark loam .2 feet thick lay beneath Level E at 6.9 to 7.1 feet below surface. The lens, designated Feature 2, was restricted to the southern half of the unit. Artifacts recovered from this layer included ceramics, brick fragments, window glass, and a complete bottle with raised lettering: "J. CAIRNS ST. LOUIS, MO," dating to between 1867 and 1891 based on stylistic characteristics (Plate 22a, left).

Feature 2 was underlain by brown silty sand mixed with brick fragments, cinders, amorphous limestone debris, metal fragments, and burnt ceramics and glass. Identifiable ceramics included the ubiquitous ironstone, as well as pearlware and hard porcelain. Container glass recovered from Level G provided range dates clustering around 1867 to 1880 (Appendix A).

Level H consisted of a darker silty sand mixed with building material (window glass, brick fragments, limestone fragments, burnt wood), as well as ironstone and whiteware ceramics, and container glass post-dating 1880. Level H is distinct from Level G only in the color of the silty sand, since the artifacts, especially the architectural material, is the same. Possibly both Levels G and H are part of the same demolition or filling episode.

Level H extended from 7.9 feet to a depth of 8.3 feet below surface, and overlaid a burned wood layer (Figure 22). The burned wood, Feature 3, covered the entire floor and sloped almost a foot from north to south. Cultural material recovered directly above the floor was similar to and contemporaneous with the range of artifactual material recovered in Levels G and H (1867 to present). Though the wood layer appears to represent burning of structural material at this level, there was no additional evidence to allow for a determination of the function and origin of the wooden structure. It is certain, though, that the charred wood was burned in situ and later was buried under demolition rubble and other fill constituting Levels G and H. This appears to be the case because the ash associated with the burned floor would not have been present had the burning taken place prior to deposition. It is conceivable that the structural material and burned wood in Levels G and H represent demolition activities following the tornado and fire of 1896.

Beneath the burned wood level is light brown sandy silt, Level I, extending from about 8.6 to 10 feet below surface. Cultural material was sparse in this level, and consisted of a few bone, metal and brick fragments and flecks of coal. At 10 feet below surface, a dark, sloping lens of silty sand .3 feet thick with ash, burned wood, bone, melted



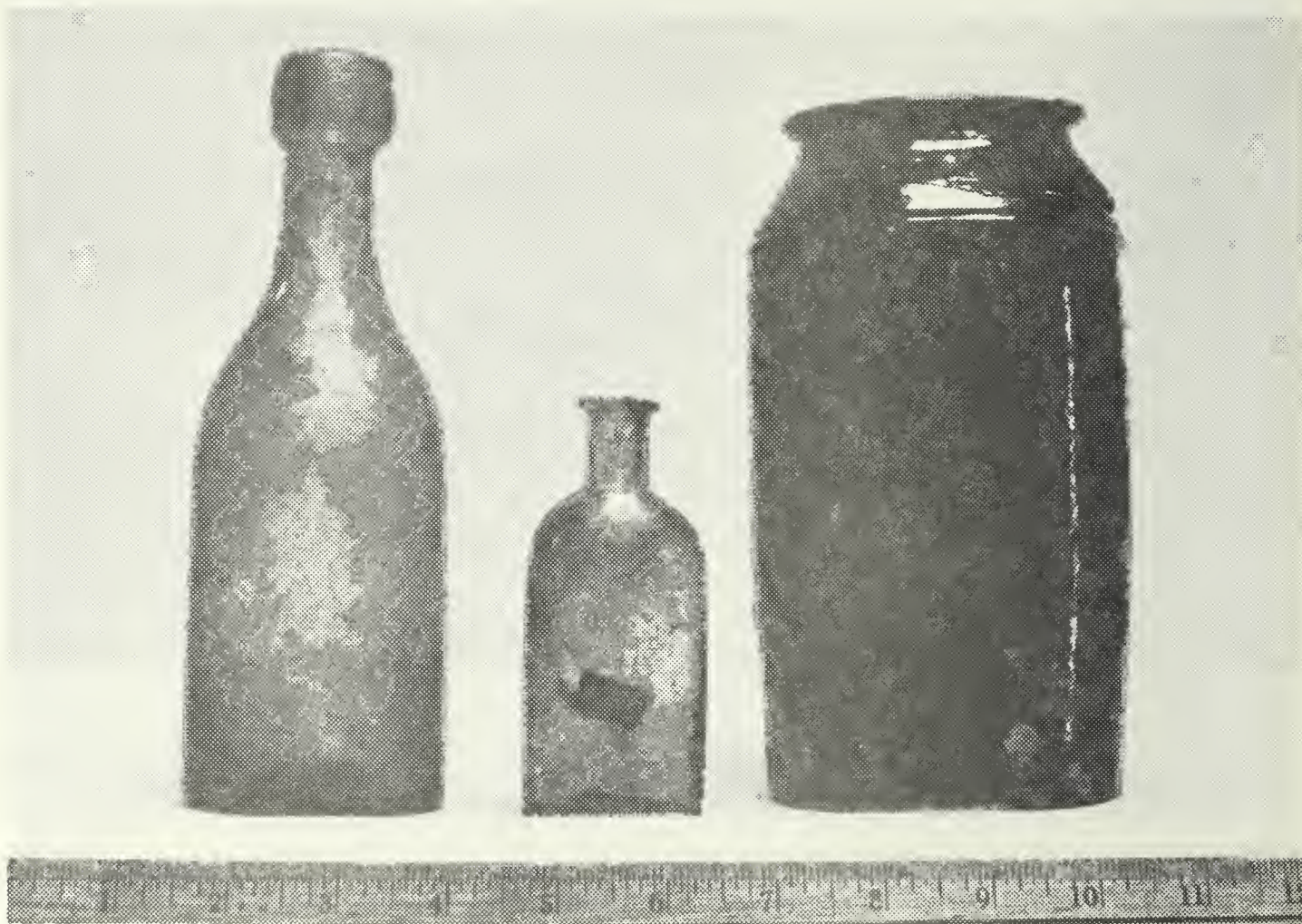


PLATE 22. A. Artifacts from the Bonnie's Tap Excavations, Test Unit 1.

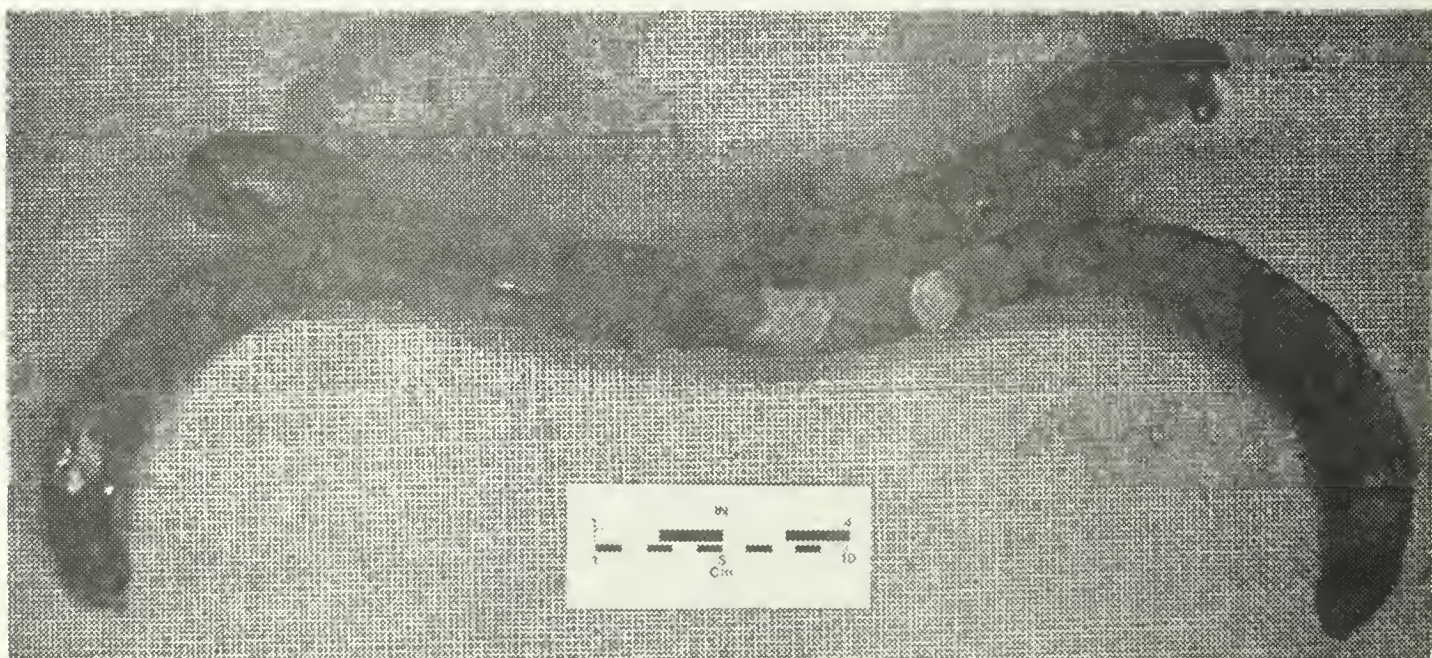


PLATE 22. B. Bonnie's Tap Excavations, Test Unit 2, Ice Tongs.



glass, and metal fragments was uncovered. The lens, designated Feature 4, produced fragments of almost an entire red paste earthenware jug (Plate 22a, right), and a piece of pressed container glass dating sometime after 1867. Plate 21b depicts this level at approximately 10 feet below surface. In the southeast corner of the unit, the yellow silty sand layer emerged at the level of the dark stratum.

Extending from the bottom of Feature 4 to a depth of about 10.8 feet below surface was silty sand with flecks of charcoal that graded into sterile silty sand to a depth of 15 feet (Figure 22). No artifactual material was recovered in Level J or sterile Level K.

Test Unit 2 was excavated to a depth of over 8 feet below surface. This unit contained various fill levels to a depth of 7 feet below surface, where a brick floor was located (Plate 21a) that appeared to be related to and probably contiguous with the brick feature in Unit 1. The layers above the brick floor are depicted in Figure 23. These levels above the floor appear to have been non-occupation levels associated with landfilling activities during the 20th century. Level A consisted of reddish yellow clay extending to a depth of about 2.15 feet below surface with a lens of ashy loam about .1 feet thick occurring at .65 below surface. Artifactual material indicates a post-1954 date of deposition. Level B consisted of several mixed fill layers including sandy loam with brick, mortar, and limestone rubble from 2.5 to 3.5 feet below surface, limestone rubble from 3.5 to 3.8 feet below surface, sandy loam with brick fragments from 3.8 to 4.4 feet below surface, ashy sand with brick rubble from 4.4 to 4.7 feet below surface, and medium brown sand with limestone fragments 4.7 to 5.1 feet below surface. Cultural material recovered from Level B indicated mixing of levels with artifacts ranging from the late 19th century to the second quarter of the 20th century (Appendix A). A bottle glass fragment with a maker's mark dating to between 1929 and 1954 provides the terminus post quem for the deepest stratum in Level B.

Level C consisted of sand and gravel mixed with limestone and brick debris. Level C extended to a depth of about 6 feet on the north side of the unit and sloped to the south to an elevation of approximately 5.3 feet below surface. A glass bottle with a maker's mark established a terminus post quem of 1940 to 1947 for this level.

Beneath Level C and overlying the brick floor feature was gray sandy ash (Level D) extending from 5.4 on the south side of the unit to approximately 6.3 on the north end (Figure 23). Artifacts recovered from the ash layer were slightly melted or burned and included window glass, ironstone ceramics, bone, a pair of ice tongs (Plate 22b), and some cut nails.

The brick floor at the bottom of the ash layer was dry laid in sand (Plate 21a). The sand had a greasy, oily appearance that probably resulted from an absorption of machine oil and fuel during the period when the carpenter shop, shown on the 1910 Sanborn Insurance Company map, was in use. The bricks were laid on top of a medium brown sand .4 feet thick that contained ironstone ceramics, window glass, wire nails, bone, and container glass post-dating 1880. From approximately 7 feet below

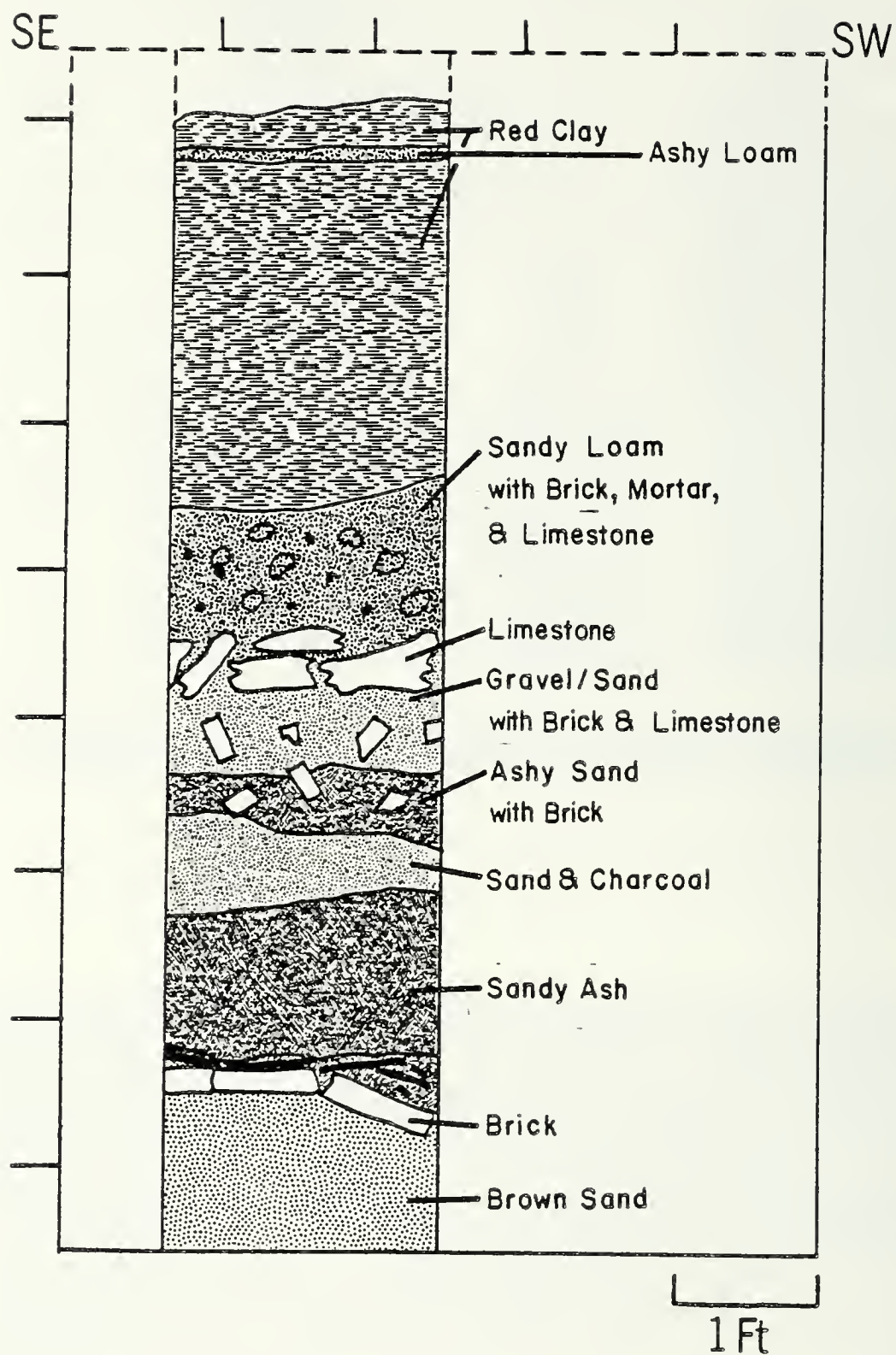


FIGURE 23. Bonnie's Tap, Test Unit 2, South Wall Profile.



surface to 8.5 feet was sand grading into sandy silt with ceramics, bottle glass, bone, and container glass post-dating 1880 (Appendix A), as well as building material such as burned wood, brick, mortar, and limestone fragments that may represent the 1896 tornado cleanup. An auger test was placed in the bottom of this unit to a depth of 13 feet below surface. No artifactual material was recovered below 10 feet below surface.

A comparison between Unit 1 and Unit 2 reveals two things. First, the brick floor (Plate 21a) appears at the same level below surface in both test pits, suggesting a continuous brick feature on top of sand extending probably all the way to Broadway Avenue. The terminus of the brick feature in Unit 1 may indicate either the location of a structure associated with the brick to the south or deep demolition or removal of brick at sometime in the past. Examination of the 1910 Sanborn Insurance map indicates that Unit 1 was placed near the north side of a carpenter shop and warehouse (Figure 21). Possibly, then, the brick feature is a walking driveway or even a loading dock to permit access and use of the area between the carpenter shop and Broadway Avenue.

The second comparison between both units can be made between the layers above the brick floor. Though there is a great deal of discontinuity between the levels illustrated for each test unit (see Figures 22 and 23), the overburden above the brick floor in each unit can be confidently dated as post-1930 fill, based predominantly on bottle glass. The variation between fill from each test unit and the north to south slope of these levels suggests two different types of dumping patterns. The last dumping or filling activity is known chiefly through local informant interview and consists of the top 2.5 feet of yellow clay. The clay was deposited over the site and graded over a large area with heavy machinery. The underlying dark sandy loam was probably similarly deposited. However, the underlying rubble and sand layers have a definite slope and appear in some cases to be interbedded, suggesting local dumping without grading over a short period of time. Landfilling in this manner could indicate a hiatus of occupation following abandonment of the carpenter shop while the area was being raised. Much closer examination of the fill layers over a wider area of the site would be necessary to prove this thesis.

The Bonnie's Tap testing indicates at least one intact 1910 to ca. 1920 level probably related to the carpenter shop/warehouse use of the area. It is possible that remains of the carpenter shop are buried further south (3 to 10 feet south of Test Unit 1). Beneath the brick level was structural debris that was probably associated with cleanup following the 1896 tornado. There was little evidence of intact deposits within or below this layer of debris, aside from the earthenware jug in Feature 4 of Unit 1, though the small sample of the area explored by the two test units precludes ruling out altogether the potential for preserved pre-1896 occupation levels. In any case, such intact deposits, if they do exist, would be buried beneath seven feet of overburden. Final recommendations for the Bonnie's Tap site will be included in Chapter IX.

## THE WIES HOTEL (S-677)

The Wies hotel is located at the intersection of Sullivan and Missouri Avenues, on the north side of Missouri Avenue, approximately 750 feet east of the Tremont hotel (Figure 3b). Though the Wies hotel is not on the island, it is so associated with transportation and the railroads that it will be included in this section for convenience.

The location of the passenger relay depot across Sullivan Avenue from the Wies hotel accounts for the presence of two hotels in this vicinity. The Christy Avenue dike (Missouri Avenue), built in the late 1860s, and the relay depot, constructed in the mid-1870s, establish the earliest date at which a hotel could have been supported in this vicinity of the city.

A structure is shown at this location on the 1881 St. Louis District, U.S. Army Corps of Engineers, river map (Figure 9), but it is not known if it is the same structure. A structure positively identified as the Wies hotel is first shown on a 1910 Sanborn map, which states that the hotel was heated by hot water and illuminated by both electricity and gas (Figure 24). The hotel is also shown in a 1909 photograph (Plate 23a).

The hotel is a 3-story brick structure, ten bays by five bays, that rests on a coursed limestone rubble foundation. The roof is flat. At the southwest corner of the building, over the main entrance to the hotel, is a 2-story oriel crowned by battlements and a decorative brickwork frieze. The frieze continues around the two sides of the structure that face Missouri Avenue and Sullivan Avenue. The windows are capped with brick relieving arches (Plate 23b).

The structure is currently in an advanced state of disrepair and does not appear to meet the minimum criteria for nomination to the National Register of Historic Places. Therefore, no further work is recommended.

## THE TREMONT HOTEL (S-678)

The Tremont hotel is located at the corner of Missouri and Brooklyn Avenues approximately 750 feet west of the Wies hotel (Figure 3b). Like the Wies hotel, the Tremont hotel probably dates to after construction of the relay depot in the early 1870s.

The original hotel was destroyed by the tornado of 1896. Maggie Herbert of Washington, Indiana, suffered a broken arm when the then Tremont house was hit by the winds. She gave this report of the devastation:

"I was in the dining room of the Tremont house when the storm occurred. A portion of the roof blew off and half a dozen of us ran to get out of the way of flying timbers and bricks. We ran into the kitchen and back into the dining room and finally the whole house fell in. Mrs. Hays, the landlady, and two or three



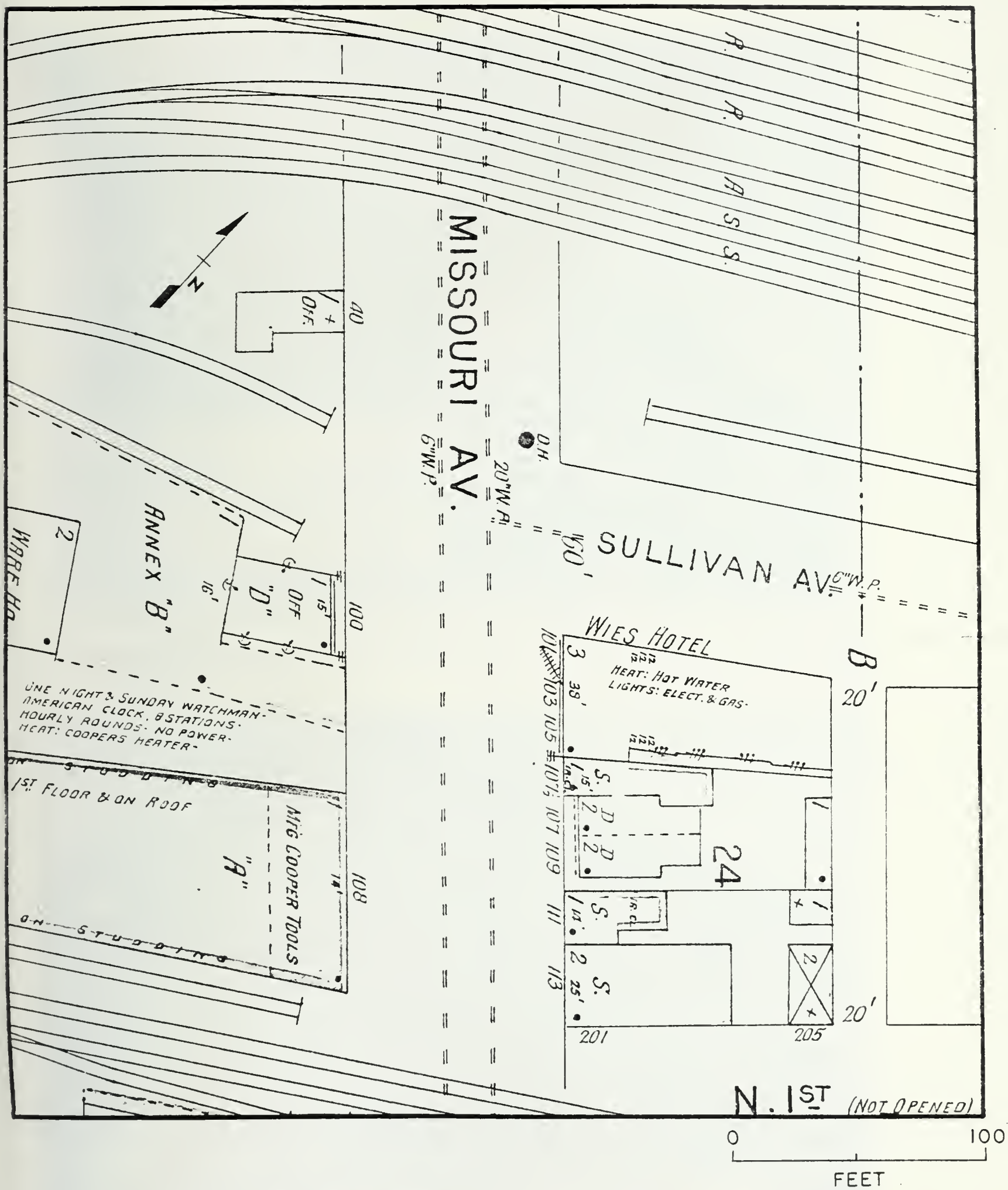


FIGURE 24. Wies Hotel, from the 1910 Sanborn Insurance Map. Courtesy of the University of Illinois Library.





PLATE 23. A. Wies Hotel 1906. Courtesy of the Missouri Historical Society.



PLATE 23. B. Wies Hotel in 1980.



others were killed and the rest of us badly hurt" (Curzon 1896:217).

This eyewitness account of property destruction and loss of life illustrates not only the strength of the tornado, but also several details about the hotel. The most obvious is the fact that timbers and bricks were used in the construction of the first hotel. Second is the reference to a dining room and kitchen that helps to define the services provided by the Tremont hotel. The Tremont hotel was rebuilt on the foundations of the original structure and was utilized as a hotel up to the mid-20th century. The last use of the Tremont was as a boarding house for the elderly (Ed Deatherage, personal communication 1981). The Tremont hotel was demolished during the 1970s, leaving only the foundation and the first floor intact.

The foundation of the Tremont hotel is of thick limestone rubble construction (Plate 24a). The foundation defines a structure roughly 50 feet square except for the southern half of the structure, which has a recessed eastern wall making the rear half only 44 feet wide (Figure 25). Keystone arched windows in the eastern and southern walls suggest a late 19th-century date of construction for the limestone foundation walls (Plate 24b). Inside the structure, a limestone rubble interior support wall extends north to south through the middle of the basement. The 2 by 8 inch floor joists of the first floor are laid across the three walls (Plate 25a) and support a wooden floor.

The 1910 Sanborn Insurance map, on which Figure 25 is based, shows the Tremont hotel in more detail. The structure is 2-story brick with a composition or gravel roof. A 2-story rectangular addition, 33 feet long and 15 feet wide, with a 2-story frame partition (possibly a porch) on the east side, and a 1-story rear addition on the rear of the main structure, all with composition or gravel roofs, apparently did not escape total demolition. No above-ground remains were noted of this rear portion. Possibly the rear portion was an addition to the original pre-1896 limestone foundation structure, and utilized brick or concrete piers that were salvaged during 1970s demolition. The Sanborn map also indicates a 1-story frame partition porch on the front (north) side of the main structure (Figure 25).

#### Testing at the Tremont Hotel

To determine whether there were any intact archaeological remains of significance at the hotel, archaeological testing was conducted. The placement of the test pits was determined by the degree of impact to the site and by the ground cover. In addition, it was necessary to examine both the interior of the structure and the yard for archaeological potential. The west side of the structure was eliminated from investigation since Brooklyn Avenue ran along the west side of the hotel and little would be gained from testing in that location. The east side of the main structure could not be tested because the area had been filled and was being used as a driveway for the household next door. The front part had





PLATE 24. A. Tremont Hotel Foundation, Looking Southwest, 1980.



PLATE 24. B. Arched Basement Window, Tremont Hotel, 1980.



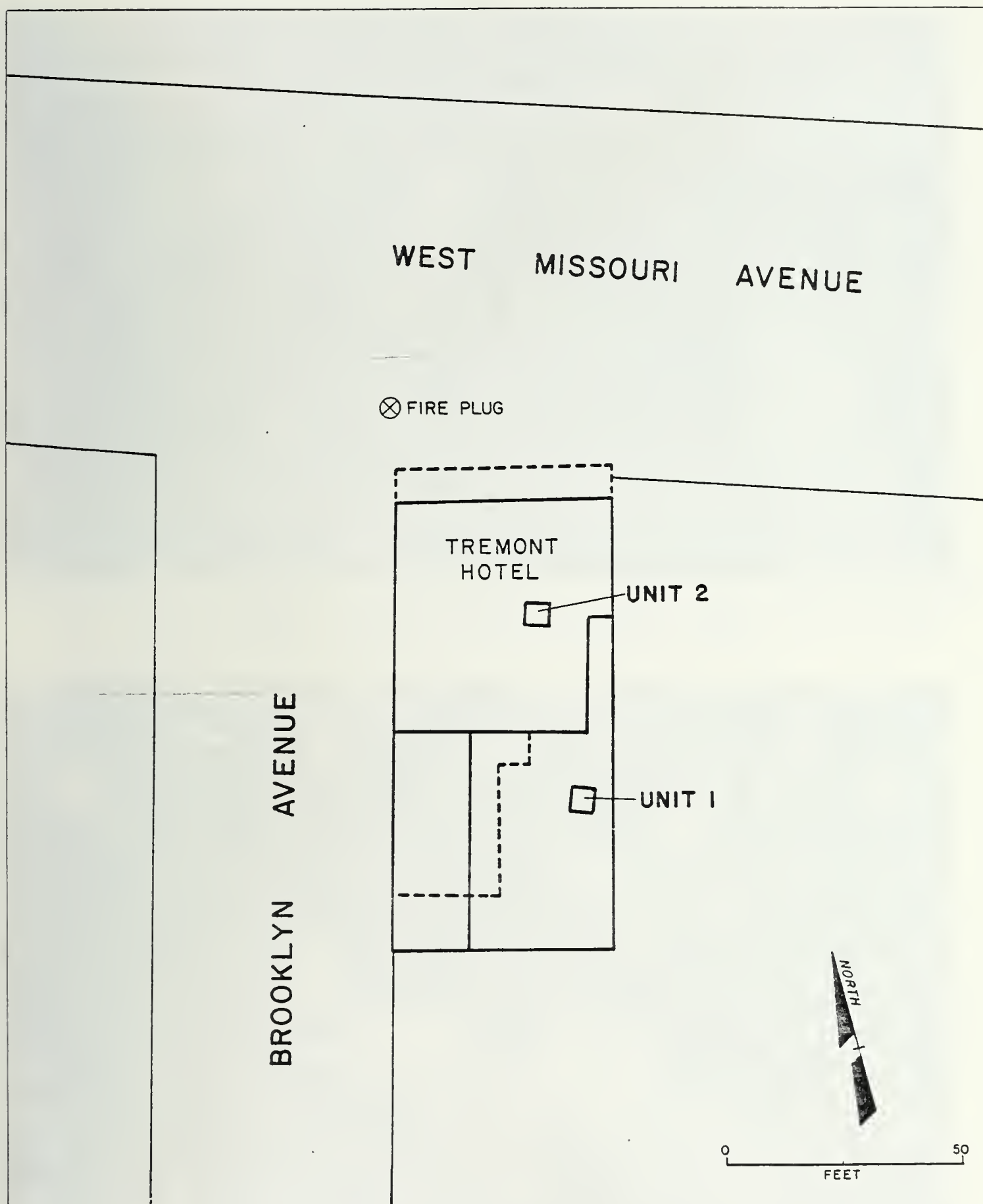


FIGURE 25. Site Plan of the Tremont Hotel, Based on the 1910 Sanborn Insurance Map.





PLATE 25. A. Tremont Hotel Foundation and Floor Joists, 1980.



PLATE 25. B. Tremont Hotel Basement, Test Unit 2, 1980.



also been filled and, in addition, has been greatly impacted by utility line work along Missouri Avenue. On the south side, a large pile of wood covered much of the back yard where the 2-story rear addition was located.

Behind the southeast corner of the main structure, a cistern was located in what appeared to be an intact portion of the back yard. One five foot-square test pit was placed in that location. The second test pit was placed in the interior of the hotel (Figure 25).

Test Unit 1 was hand excavated to a depth of 4.16 feet below surface, and the results were generally indicative of demolition and local dumping of coal stove cinders and refuse (Figure 26). The top layer, Level A, consisted of brick, cut limestone, and mortar rubble in brown, sandy loam extending to a depth of 0.58 feet below surface. This was underlain by Level B, a rubble and sandy loam layer, extending to a depth of 1.3 feet below surface, similar to Level A except with a higher percentage of brick. Artifacts in Level B other than structural material consisted of ironstone and whiteware ceramics, bottle glass, and bone. Level A, in contrast, had a higher percentage and diversity of ceramics (ironstone, whiteware, porcelain, earthenware, stoneware) and bottle glass, as well as structural material and representations of other classes of artifacts, including hotel hardware and furnishings, clothing and other personal items, and bone (Appendix A). These two levels appear to date to the 20th century on the basis of identifiable artifacts and the abundance of demolition material related to the 1970s demolition of the hotel.

Below the demolition layer, from about 1.3 feet to 3.7 feet below surface, were mottled or thin interbedded layers of cinder, ash, and coal in silt. Levels C, D, and E consist of what appears to be coal stove waste dumping mixed with domestic refuse, including ceramics, bottle glass, bone, and some structural material in alluvially deposited silt. Level E, located 3 to 3.4 feet below surface, also contained a large percentage of building material such as window glass, cut nails, and brick fragments. Bottle glass fragments with a date range of 1867 to 1880 indicate that this level is associated with the original pre-1896 hotel, and possibly is related to the demolition of the tornado-damaged rear of the hotel. At 3.5 feet below surface, the coal, ash, and clinker mottling ends and the soil becomes completely silt. Auger tests indicate that the silt extends to a depth of 8 feet 3 inches below surface, where clay begins.

The cinder, coal, ash layers with domestic refuse in the silt level at 1.3 to 3.7 feet below surface are theorized to have resulted from a combination of coal-burning stove waste and domestic trash dumping in the flood-prone area adjacent to Cahokia Creek. Like the deposits at the B Street house and the Wolfer store, the dumping of coal stove waste and household refuse has resulted in relatively thick accumulations, especially in the back yards of structures. At the Tremont hotel site, the higher percentage of silt to coal and cinder, and the stratified arrangement of the layers often with "clean" silt layers interbedded with silt and coal, suggests that the process of flooding has been an important factor in the development of these cultural deposits. The

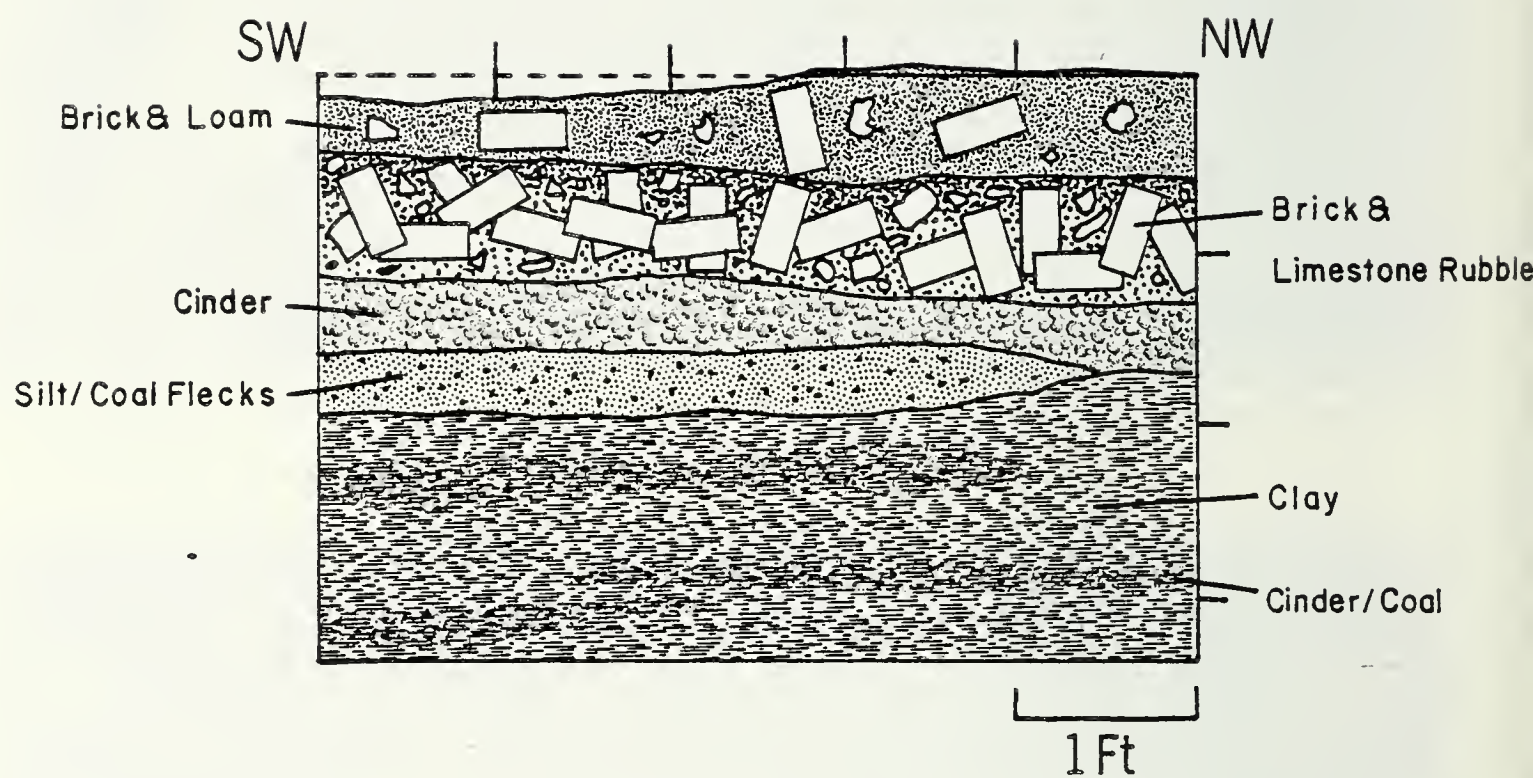


FIGURE 26. Tremont Hotel, Test Unit 1, West Wall Profile.



results of further analysis and inter-site comparison of the yard deposits at the Tremont hotel and other sites will be presented in Chapter VII.

The second test unit was placed inside the foundation walls of the hotel (Figure 25) in order to provide information on the basement deposits and construction details. The datum for the test excavation was provided by a nail on a floor joist 4.6 feet above the top of the basement fill. The first level in the test unit was one foot of loose scrap lumber, much of it floor boards from the hotel. Below the wood was more wood building rubble: floor boards, trimming, lathing, 2 by 4's, 2 by 6's, and some plaster, along with lawn clippings, leaves, and household trash thrown inside since the hotel demolition. At 6.4 feet below datum, red brick, limestone mortar, cinderblock rubble, nails, and window glass began to appear. At a depth of about 6.7 feet below datum, the rubble consisted of smaller fragments of brick, limestone, and mortar, as well as window glass and nails, in a dark loamy soil.

A section of the cement-floored base was uncovered at 6.8 feet below surface (Plate 25b). The floor was about half an inch thick and was warped and broken, possibly as a result of demolition. The cement floor was laid on fill consisting of cinder, ash, gravel, mortar, and limestone rubble extending from about 6.85 to 8.30 feet below datum. Artifacts from this level consist of post-1880 bottle glass, ironstone, whiteware, pearlware, porcelain, creamware, earthenware, bone, window glass, mortar, and brick fragments (Appendix A, Levels D, E, F, and G).

Below Level G the fill ended and a "clean" sandy clay level overlaid and was mottled with sandy clay. This level included small fragments of brick, limestone, charcoal, coal, and ash, and extended to a depth of approximately 8.65 feet below datum. There were no artifacts from this level temporarily sensitive enough to provide a terminus post quem. An auger test into the test pit revealed that sterile silt was located at a depth of about 8.8 feet below datum.

The rubble and cinder fill and the sandy clay with rubble below the cement floor can be dated confidently to the last decade of the 19th century, based on bottle glass made between 1880 to 1900 and after 1888 (Appendix A, Level G). Though it is possible that the fill layers were part of the original plan of the hotel (if the hotel was built after 1888), it seems more likely that these layers were part of a renovation of the basement, possibly after the tornado of 1896. The purpose of such a fill layer in the original plan might have been to fill the spaces between basement wood sills in a timber-floored basement similar to that documented for the Douglas School. Possibly the fill was introduced solely as a base for the poured concrete floor. Further excavation would be necessary to arrive at a more meaningful interpretation of the basement deposits and hotel construction and renovation, though this aspect of the site is not significant enough to warrant further investigation.

The cultural deposits in the hotel basement do not appear to have any further research potential, and along with the structural remains, do not

qualify for inclusion in the National Register of Historic Places. The back yard archaeological deposits will be discussed in Chapter VII and recommendations based on the research potential of this part of the site will be forwarded in the Summary and Recommendations.

#### THE EAST ST. LOUIS GAS WORKS (S-676)

The East St. Louis gas works was established by the East St. Louis Light and Coke Company in 1874 near a bend in Cahokia Creek at the junction of Brooklyn and St. Louis Avenues (Figure 3b). The original East St. Louis gas works was destroyed by the tornado of 1896 (Plate 26a) and was rebuilt in the early 1900s. A 1910 Sanborn Insurance Company map shows the layout of the gas works, including two circular gasometers, a lime-house, a water gas plant, two sets of retorts, a coal shed, a purifier room, an office, a repair room, and a meter building (Figure 27). A photograph taken by Franke in 1906 (Plate 26b) reveals that the gas works were still operating after the beginning of the 20th century. However, aerial photographs taken in 1928 show that, by that time, the complex had been demolished except for a single gas tank, the foundation remains of which can still be observed above ground. The demolition of the gas works was probably conducted in conjunction with demolition of the original CB&Q Roundhouse located nearby. An examination of the 1910 Sanborn map (Figure 27) and the 1906 Franke photograph (Plate 26b) in combination provide a detailed view of the structures associated with this site. Plate 26b is a view to the northwest across a bend in Cahokia Creek; on the Sanborn map (Figure 27), the point-of-view of Plate 26b would be at the bottom right-hand corner of the map.

The two circular gasometers, 65 feet and 60 feet in diameter, are shown in the right background of Plate 26b. The gasometers were metal, probably iron plates with an exterior iron truss framework. The gasometer functioned as a holding tank for gas. The iron tank consisted of a telescoping section that rested, when empty, in a pit of slightly larger diameter, and filled with water to create a seal that prevented gas from escaping where the pit and iron tank interface. An additional feature of the telescoping gasholder as opposed to a fixed volume gasholder was that a constant pressure was maintained on the flowing gas no matter what the volume of gas being held at a particular time. Plate 27a shows the brick gasometer pit foundation at the time of the survey. The truss framework, shown in the 1906 photograph (Plate 26b), functioned as a guiderail for the telescoping tank. At the midsection of the gasometer tank in the foreground of the complex (Plate 26b) can be seen the break between the telescoping upper storage part and the water-seal pit sleeve of the bottom portion. Close examination of the gasometer foundation shown in Plate 27a reveals a remnant of this iron guiderail in the near foreground.

The second gasometer tank, in the background of Plate 26b appears to have been a different design from the first one discussed. Instead of the iron truss guiderail, it appears that the gasholder was fixed to a guidepost in a sleeve that telescoped with the tank. The position of this second gasholder in relation to the first would suggest that this tank was in a low or empty position.



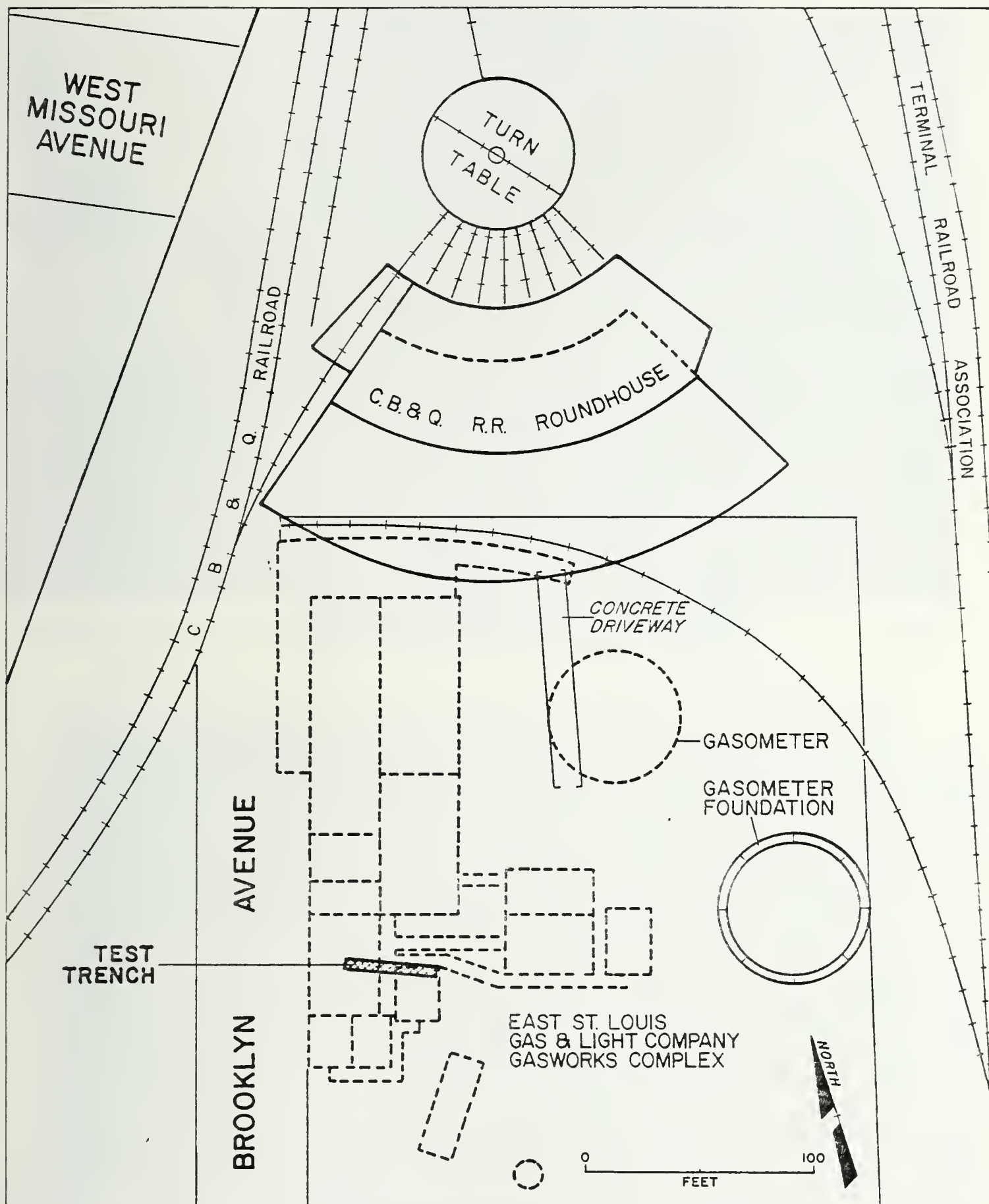


FIGURE 27. Chicago, Burlington, and Quincy Railroad Roundhouse and the East St. Louis Gas Works, Based on the 1910 and 1955 Sanborn Insurance Maps.





PLATE 26. A. East St. Louis Gas Works After the Tornado of 1896. Courtesy of the Missouri Historical Society.

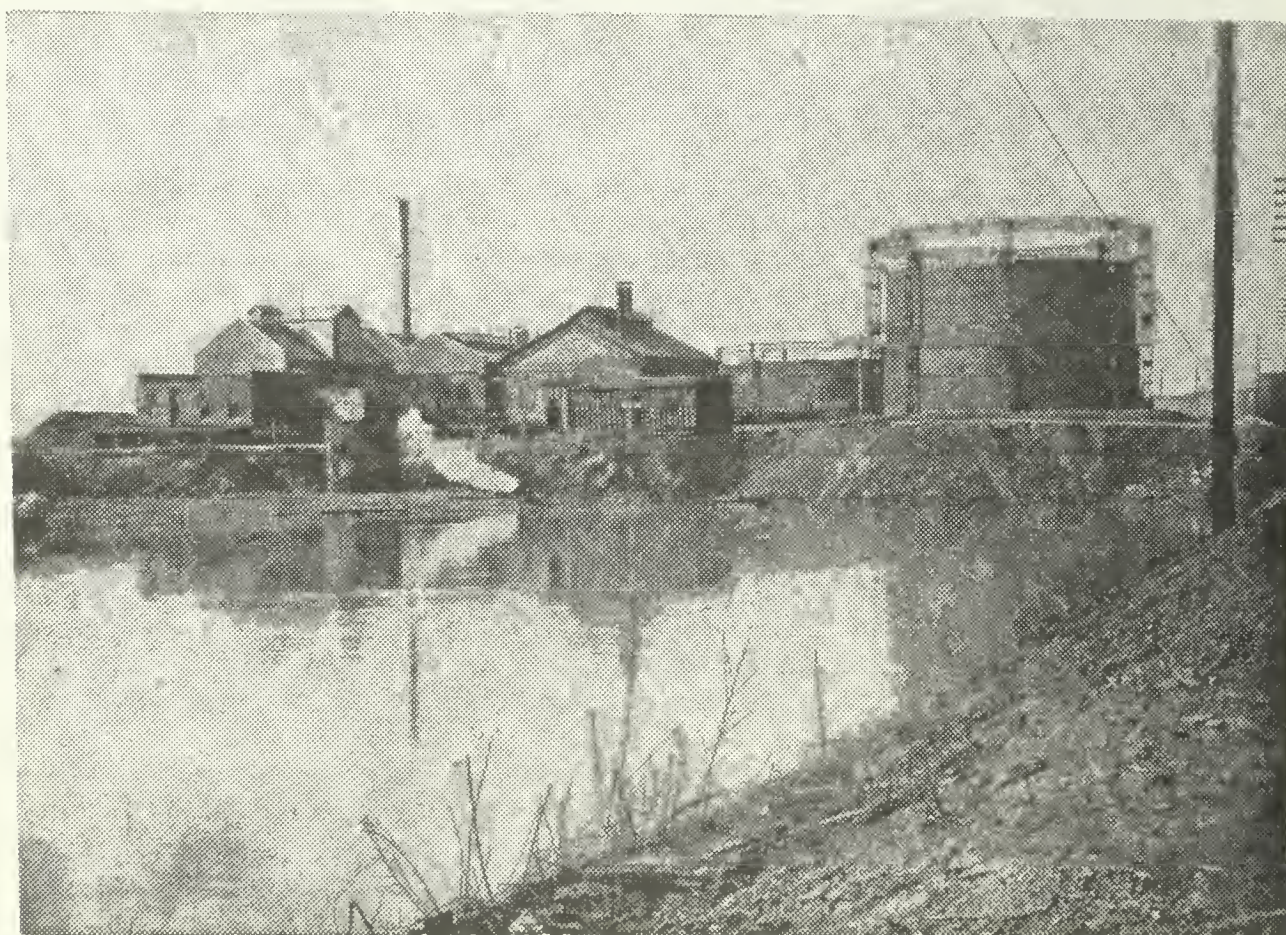


PLATE 26. B. East St. Louis Gas Works in 1906. Courtesy of the Missouri Historical Society.





PLATE 27. A. East St. Louis Gas Works, Gasometer Foundation, 1980.

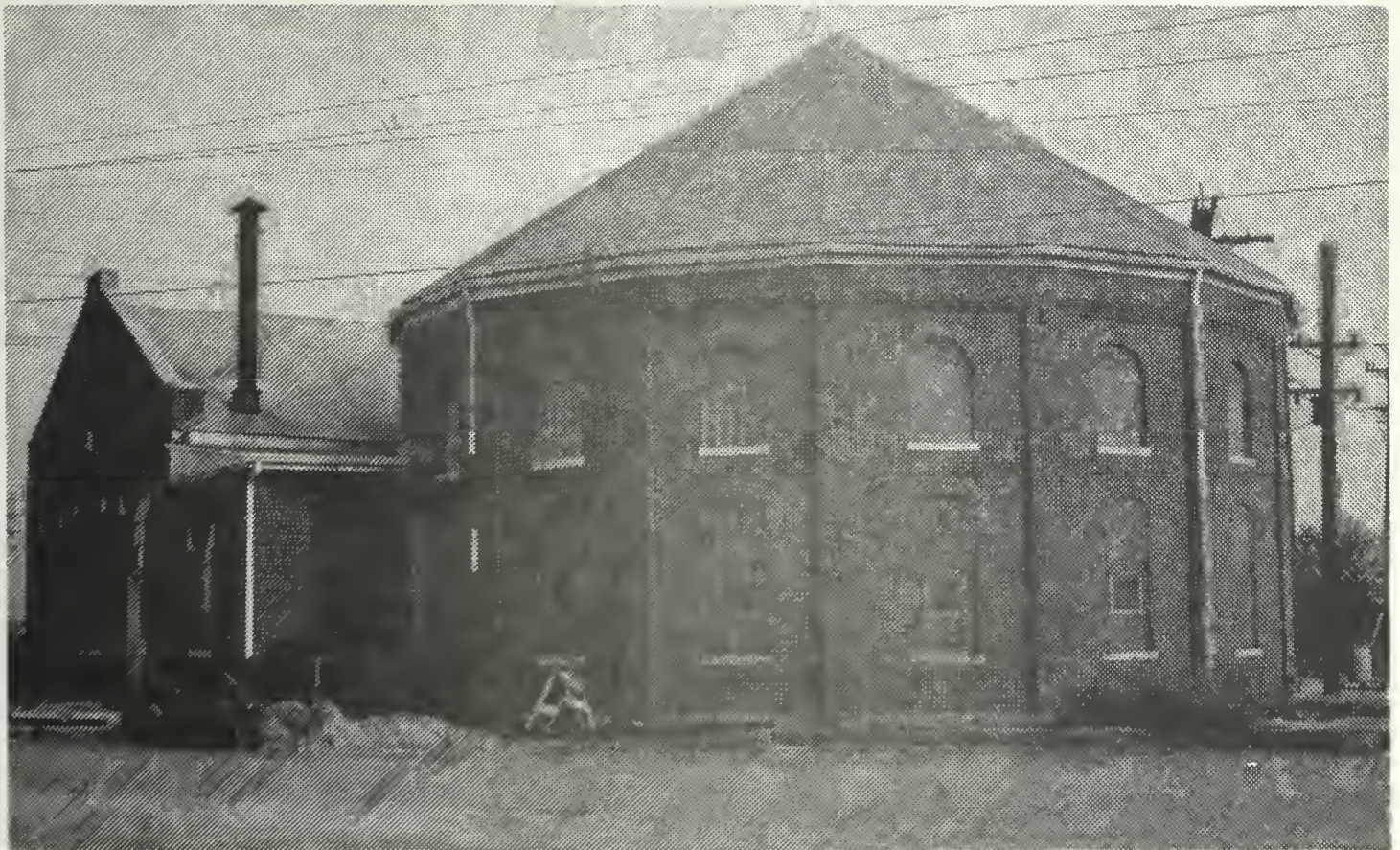


PLATE 27. B. East St. Louis Waterworks, View to the Northwest, 1980.



The majority of the other structures were constructed of brick with limestone basements to raise the structures to high grade (Plate 26b). An examination of the structures that made up the gas works complex reveals that, despite their utilitarian nature, an attempt was made to incorporate some stylistic details into their design. The 1-1/2 story water gas plant, in particular, shows definite Greek Revival characteristics, including stone quoins, a pedimented roof, and a full entablature. A clerestory on its iron roof allowed additional light into the structure.

The large brick structure housing the coal shed, boiler, retorts, office, and purifying room (Figure 27, Plate 26b) featured raised gables and an iron roof. The tall iron chimney in the background of Plate 26b was associated with the boiler room and coal shed. The retorts adjacent to the coal shed and boiler, along with the purifying room and water gas plant, were used in the destructive distillation of soft coal and the production of gas.

It is difficult to tell exactly what form of gas was being produced. Many varieties of coal gas could have been made by heating coal in the retorts in the absence of air to form coal gas, coal tar, and coke. The coal gas made up of hydrogen and methane with small amounts of carbon monoxide, carbon dioxide, nitrogen, and other hydrocarbons would then be purified by driving off the volatile constituents. The remaining "coal gas" was not very high in fuel value and often still contained tars, oils, ammonia, and hydrogen sulfide, but could be used for illumination.

Another kind of gas called blue gas or water gas can be made by passing steam over hot coke. The resulting gas burns with a bright blue flame and is higher in fuel value than coal gas. The existence of a water gas plant (Figure 27) suggests that this process was going on to some degree at the East St. Louis Gas and Light Company. Probably, as the name of the company indicates, two kinds of gas were being made. One kind for lighting and another kind for heating/cooking.

It is possible that the other by-products of the distillation of coal were utilized commercially. In the production of coal gas, an unused by-product is made called coke, which is a hard gray, porous fuel with high carbon content and few impurities. Coke, used in the smelting of iron ore, would have been in great demand in an industrial city like East St. Louis. Coal tar, another by-product of coal distillation, could have been used commercially for paving, roofing, waterproofing, and insulation.

The East St. Louis gas works is last shown on a 1911 streetcar map of the city. The next available source is the 1928 aerial photograph of the city, showing that a single, circular gas storage tank was all that remained of the site. By 1936, the aerial photos show that this tank had been removed. As the industrial demand for coal and petroleum products increased and as more efficient means of producing gas were devised in the early 20th century, the outmoded gas works plant was replaced by more sophisticated plants and storage facilities. A 1935 city map indicates that the Illinois Power and Light Company had a gas reservoir on Brooklyn Avenue just south of the old East St. Louis gas works. Though the full



dynamics of the replacement of the local gas works company by the regionally based Illinois Power Company are not understood for East St. Louis, it is presumed that this was part of a trend in 20th century economics that was marked by expansion and growth of large industries, with a concomitant development within the utility sector.

#### Archaeological Testing at the East St. Louis Gas Works Site

Archaeological testing was done at the gas works to determine whether intact building remains still exist. Initial examination of the site of the gas works revealed that the foundation of a gasometer (Plate 27a) was all that remained of the above ground features of the site. In addition, 20th-century construction at the Chicago, Burlington, and Quincy Roundhouse has encroached on the north end of the gas works site, suggesting that demolition of the gas works may have been done concurrent with this roundhouse expansion.

A backhoe trench, approximately 35 feet long, was excavated at the site of the gas works building complex (Figure 27). The deep testing was generally indicative of landfilling with brick building material, and did not reveal any intact architectural features (Figure 28). It would appear that demolition of the gas works site was accompanied by salvage of building material followed by grading of the remaining structural material. More extensive deep testing would be required to determine whether intact remains exist elsewhere on the site; however, the results of the one trench and the absence of the north gasometer foundation would suggest that the demolition was fairly intensive. Even if intact structural remains are extant, they would have to be the very bottommost foundation remains to have survived the demolition of the above ground superstructure, and it is doubtful that such information would contribute anything meaningful beyond the level of documentation provided by the historic photographs and insurance maps.

The southern gasometer foundation is the only intact area of the site that might offer some research potential. While the foundation remains of the rest of the site, if intact, would offer very little information about the design and operation of the gas works, the gasometer as a very distinctive feature of this type of industrial site, might provide information that is thus far undocumented. The design of the water seal, the method of intake and outlet of gas, how the problem of the high water table was solved in the construction of the pit and foundation, and the later adaptation of the gasometer by other tenants are some of the areas that can be explored through investigation of the gas works. The final recommendations for the East St. Louis gas works site will be made in the Summary and Recommendations chapter.

#### THE EAST ST. LOUIS WATERWORKS

The East St. Louis low service pumping station is located at the extreme north end of the island (Figure 3b, Plates 27b and 28). Though, architecturally, the waterworks building appears to be late 19th century in design, it is uncertain whether there was an earlier facility perhaps

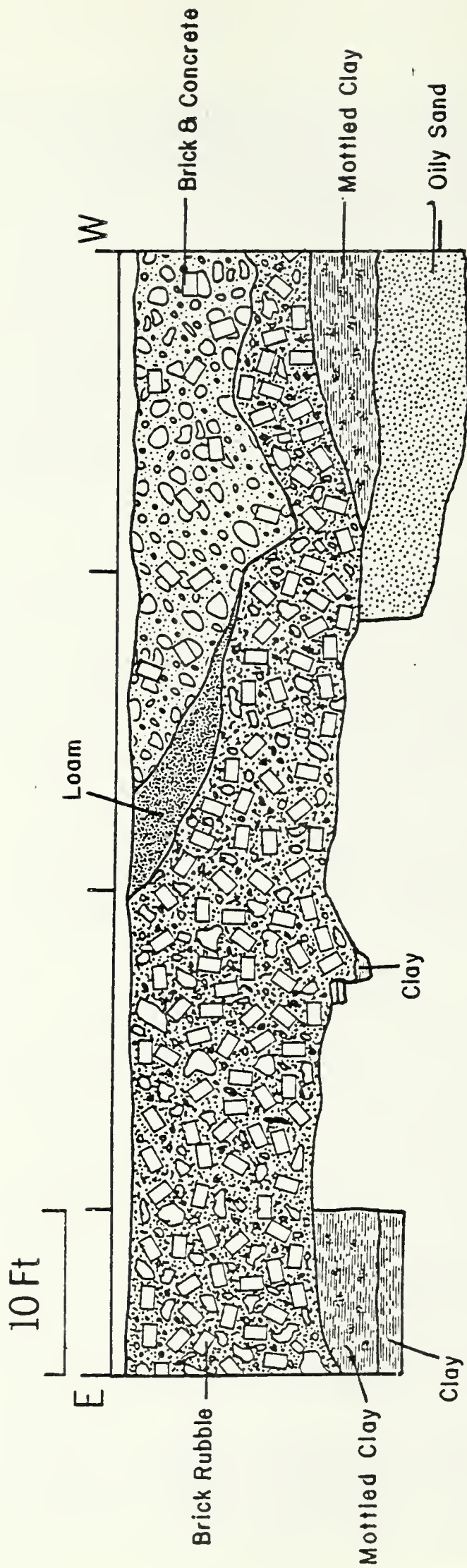


FIGURE 28. East St. Louis Gas Works, Trench Excavation, South Wall Profile.





PLATE 28. A. East St. Louis Waterworks, View to the East, 1980.



PLATE 28. B. East St. Louis Waterworks, View to the South, 1980.



destroyed by the 1896 tornado (meaning the present facilities are turn of the century in origin), or whether the waterworks plant survived the tornado with no apparent structural damage.

Though a waterworks appears on a U.S. government map of 1869 (Figure 11), it is likely that the map, used in a 1911 petition to the Illinois General Assembly, was updated to provide landmarks for easy identification of 1860s features. This thesis is supported by the absence of a waterworks on the 1875 map. By 1881, a water reservoir is shown on maps in the location of the present high-pressure pumping, filtration, and purification plant (Figure 9), and Yeakle in 1890 mentions a waterworks in the monthly progress journal of the city (1890:5). There is presently not enough data to accurately place the date of construction of the waterworks pumping station. The date of construction of the low pressure pumping station can only be conservatively placed between 1875 and 1905.

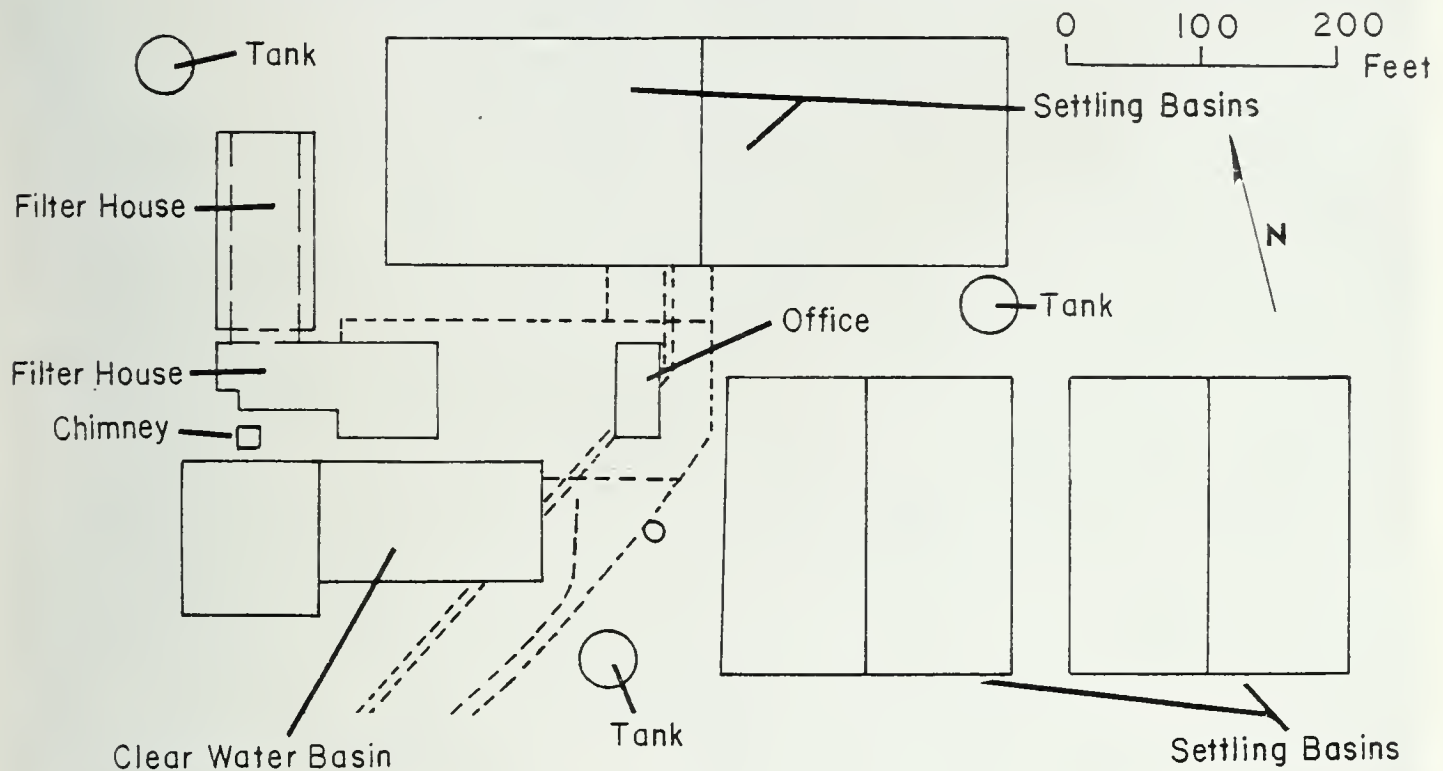
The city waterworks consists of two structures, one rectangular and one round, that are connected, although it appears that they were not constructed as one unit (Figure 29, Plates 27b and 28). Both structures are built of brick, laid in a common bond, on coursed limestone rubble foundations. The one-story rectangular building is oriented roughly north-south. It is a three bay by four bay structure with a stepped gable roof. A frieze of decorative brickwork runs along the upper portion of the west wall (Plate 28a). The north and south walls also have insets of decorative brickwork. In the center of the north and the south walls is a large arched window consisting of 36 panes topped by a fanlight (Plate 28b). Each window is capped by a round brick arch with a stone base and keystone. To the east of each of these windows is a door and to the west of each is a window. These four openings are capped by semi-elliptical brick arches with stone bases. The double door in the north gable was placed in the former location of a window, identical to the window west of the tall arched fanlight window (Plate 28b). The three windows and one door along the west elevation are also capped by semi-elliptical arches, all of the windows have stone arches.

The two-story round structure is actually divided into 16 bays, each of which is pilastered and arcaded with brick. The roof is also divided into 16 segments, corresponding to each of the bays. Each of the brick pilasters is reinforced with four, cast-iron, star-shaped wall anchors (Plate 27b). Seven of the bays (from the south elevation to the northeast) are pierced with both upstairs and downstairs openings. The northeastern bay contains a double door capped by a semi-elliptical brick arch, and an upper round arched window. The remainder of the downstairs windows are capped by semi-elliptical brick arches, while the other upstairs windows are all outlined with round brick arches. All of the windows possess stone sills and are currently lit with glass tiles. Some of the windows in the northeastern bays have been bricked in.

The interior of the waterworks plant is marked by three architectural features: the ceiling and the ceiling braces, the circular track, and the pit (Plates 29 and 30a). The ceiling is composed of metal radial trusses that radiate from a central plate (Plate 29a) to form the roof supports extending down to the top of the brick wall. At the brick wall the trusses



## HIGH PRESSURE PUMPHOUSE & FILTER PLANT



## INTAKE & LOW PRESSURE PUMPHOUSE

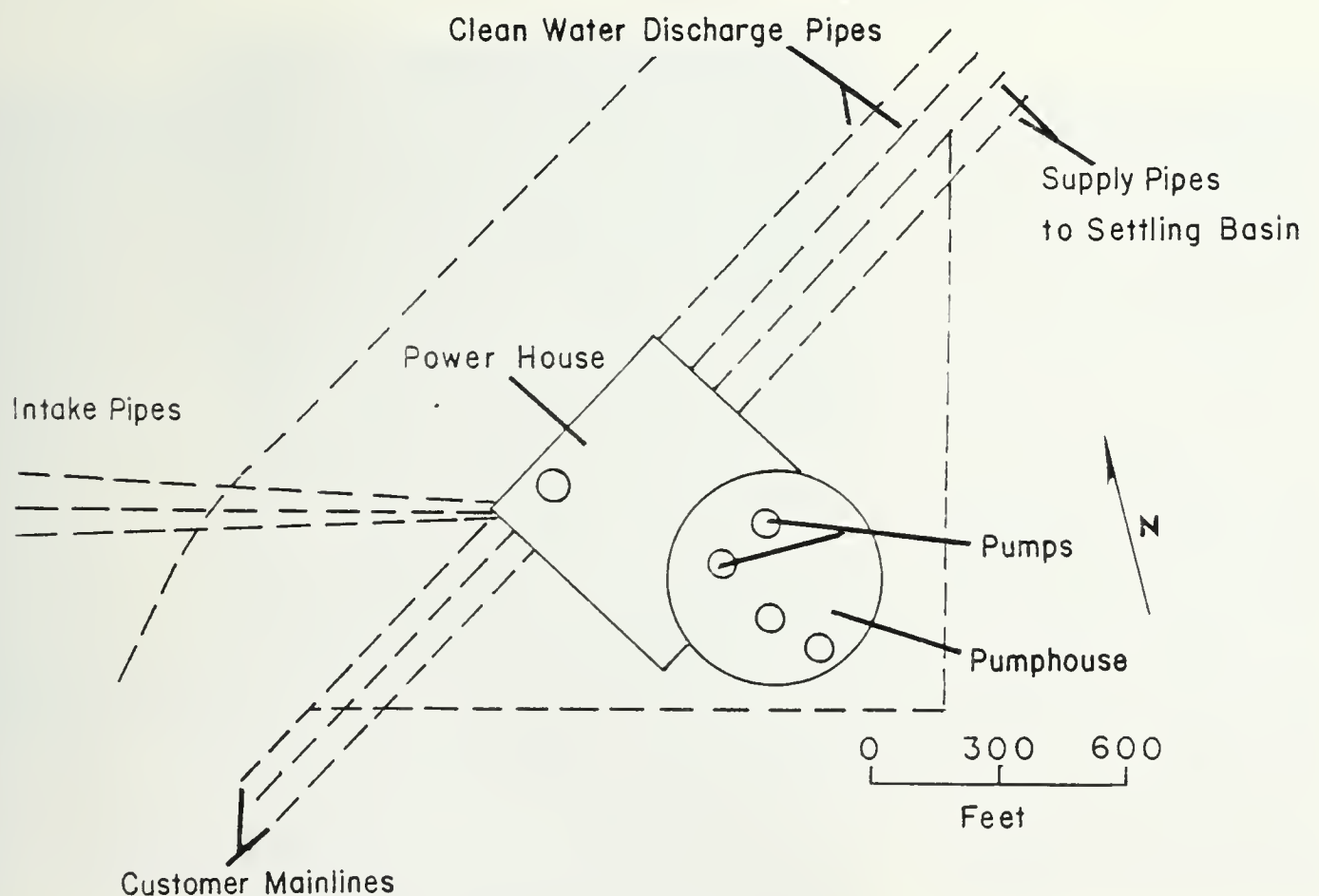


FIGURE 29. East St. Louis Waterworks, Based on the TRRA Valuation Map and the 1955 Sanborn Insurance Map.



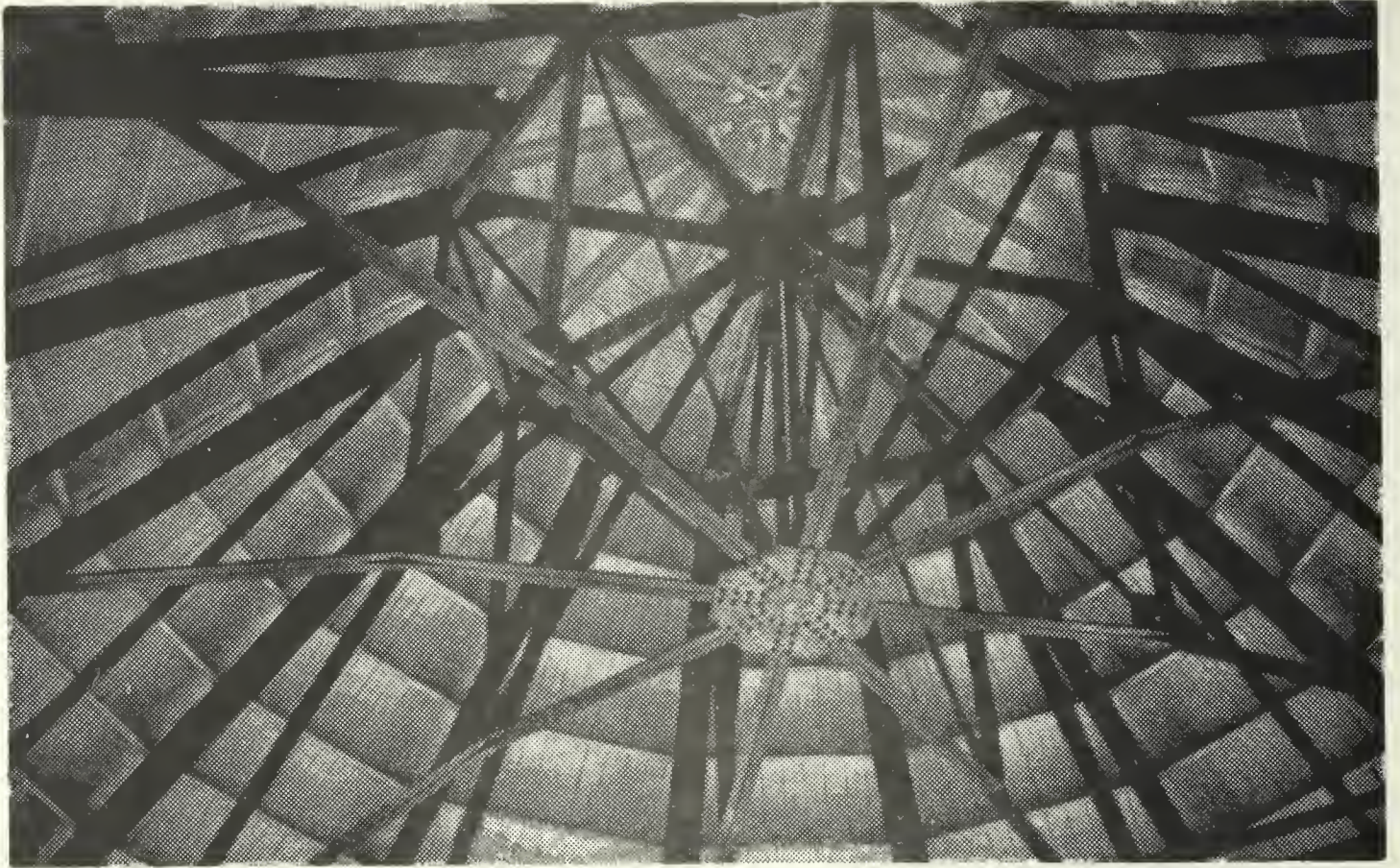


PLATE 29. A. East St. Louis Waterworks, Interior Ceiling Truss, 1980.

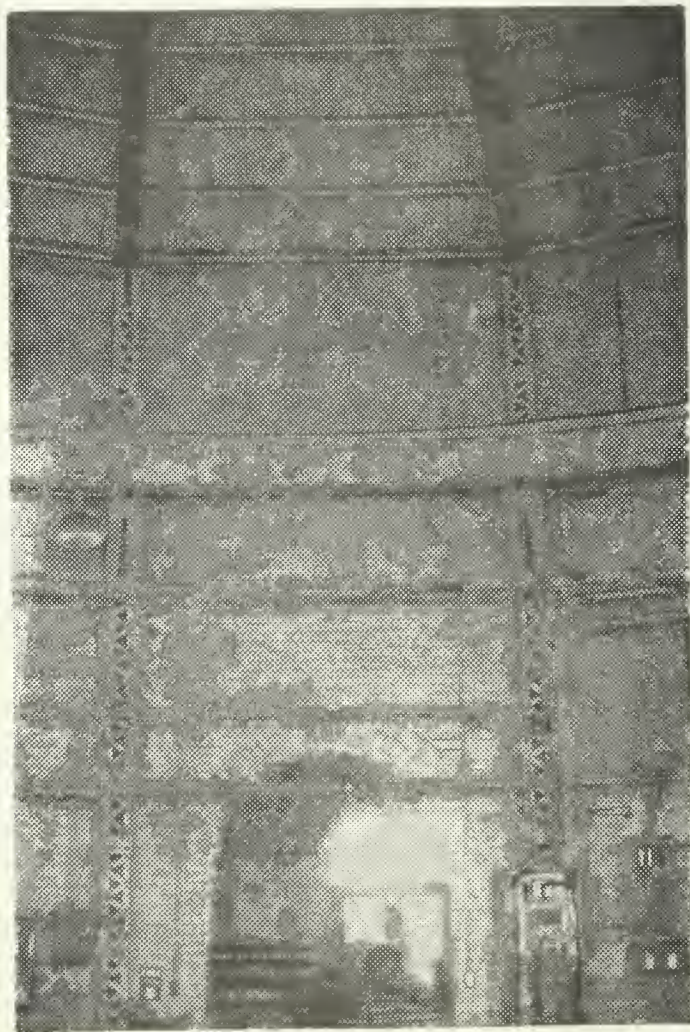


PLATE 29. B. East St. Louis Waterworks, Ceiling and Wall Braces, 1980.



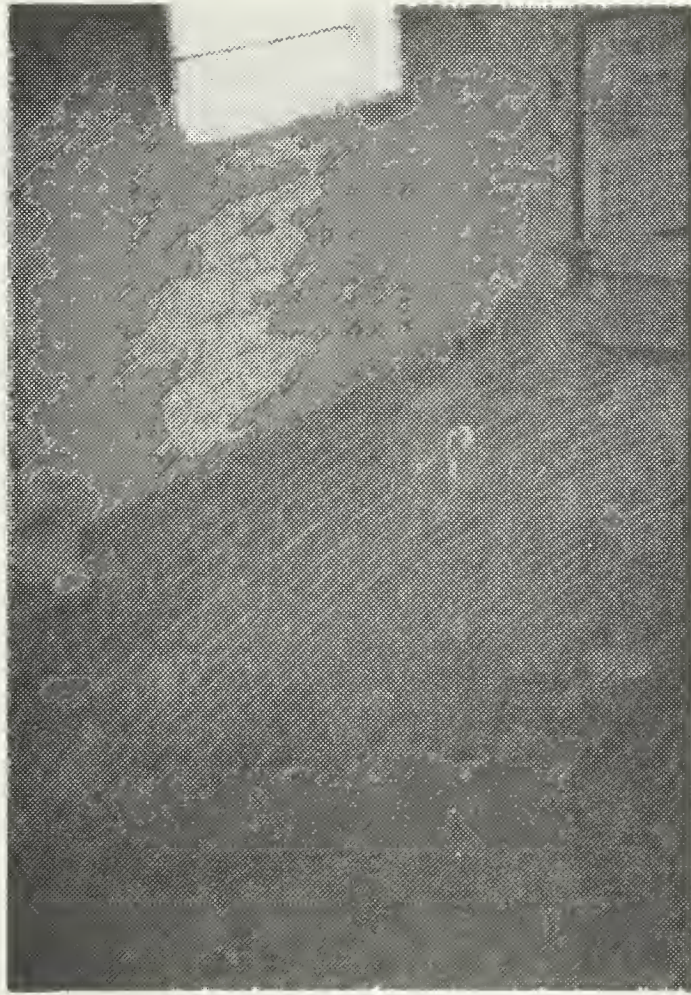


PLATE 30. A. East St. Louis Waterworks, Interior Pit, 1980.

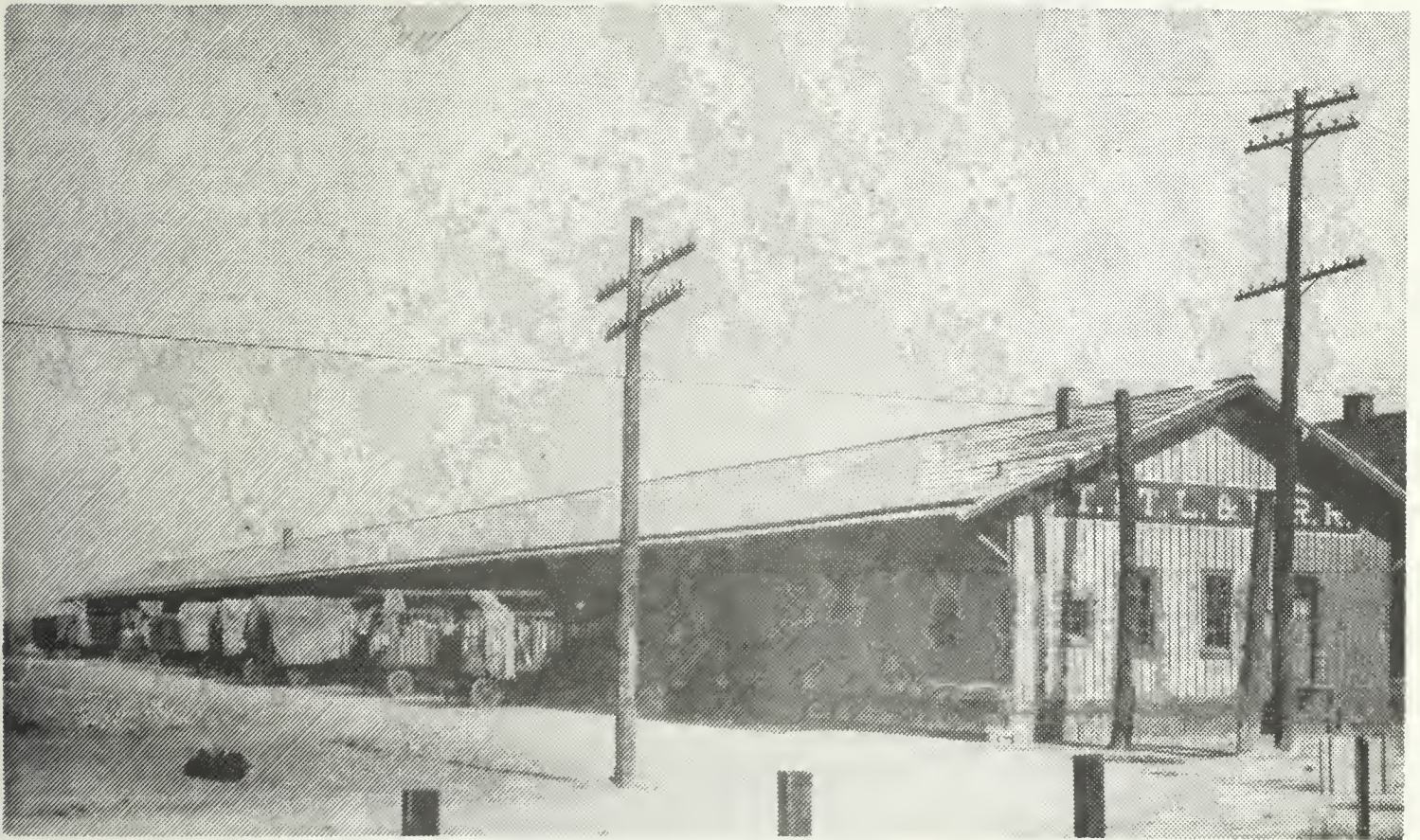


PLATE 30. B. Toledo, St. Louis, and Western Railroad (Nickel Plate) Freighthouse, 1922. Courtesy of the Missouri Historical Society.



are supported by metal braces (Plate 29b) that are located at each pilaster. The metal braces are held to the pilaster with the star-shaped anchor bolts, seen on the exterior (Plate 27b). However, the metal bracing in the pilasters is designed to hold more than just the roof. A metal track mounted to the braces forms a circular guide rail around the interior of waterworks building (Plate 29b). A heavy-duty overhead winch runs on this track.

The sublevel pit extends over much of the area of the polygonal building (Plate 30a) to a depth of more than six feet below surface. The pit walls are formed by the bricked walls of the building that extend below ground surface. The inside view indicates that the metal brace stops at ground surface as do probably the outside pilasters that hold the brace. It is not known how deep the walls go. The pit is full of pumps and pipes, and serves as an open receptacle and control room at grade level for the underground intake and supply waterpipe network laid out between the intake and low pressure pumping station; the high pressure pumping, purification, and filter plant; the Mississippi River; and the customer mainlines (Figure 29).

The diagram of underground pipes shown with the low service building complex in Figure 29 depicts the facilities around 1955. The polygonal building holds four pumps and serves as the main pumping station. A sign inside the pumphouse gives this information:

#### LOW PRESSURE PUMPING STATION

This facility pumps water from the Mississippi River to the purification and filter plant. Electricity is generated by steam to run the units.

In 1910 the pumping units consisted of a Worthington pump, capacity 10 million gallons; a Deane pump, capacity 3 million gallons; and one R.D. Wood pump with a capacity of 10 million gallons. These figures are reported as they appear on the Sanborn Insurance map. It is presumed that pump-gallon capacity is for one day. The pumps drew water from the river and discharged it into four settling basins at the high service pumping station with a total capacity of 12 million gallons. The water flowed from there through the filter plant and to clear water basins of 1.5 million gallons. From there it was pumped into the service mains with high service pumps, including one Gaskill pump, capacity of 6 million gallons; a Gaskill pump, capacity of 8 million gallons; a 5 million gallon capacity Worthington pump; and a Prescott pump with a capacity of 6 million gallons. At that time, the water facility contained 80 miles of 6 to 20 inch pipes, 304 public double hydrants, and 100 double hydrants on private mains or leased by private industry. The domestic water pressure was maintained at 55 pounds, and fire pressure at 85 to 120 pounds. The average daily consumption in East St. Louis in 1910 was 6 million gallons (Sanborn Base Map 1910).

The square building attached to the northeast side of the pump house served mainly as the power house and holds one pump (perhaps the intake unit) and the steam boilers. Three waterpipes radiate from the west corner of the power house (a 30 inch and two 36 inch suction pipes) and extend into



the river. Series of pipes also extend through the northeast and southwest sides of the power house connecting with the high pressure service facility to the north and the distribution pipes extending southward down Front Street (Figure 29). A 1919 Terminal Railroad Association valuation map shows that the power house was supplied with coal via a Wiggins Ferry railroad track spur and a coal shed addition into the northeast side of the power house. A standpipe beside the coal shed may have supplied water for the steam generation.

The East St. Louis waterworks facility, including both the low service and the high service pumping stations, is a unique industrial complex retaining much of its late 19-/early 20th-century architectural and technological integrity. Further work needs to be done to document the periods of construction and renovation, and to properly assess the technological significance of machinery still in place at both of the complexes. Also important would be a better understanding of the operation of the early to late 19th-century waterworks, and its development concurrent with the growth and evolution of the city and its big industrial water consumers. Again, though the preliminary work has focused on the low pressure pumping station, further work should expand to include the high pressure facility to the north and any other attendant facilities in the project area.

Despite the few alterations that have been made to this facility, it appears to be in remarkably good condition and has retained most of its architectural integrity. For this reason, the East St. Louis waterworks appears to meet the criteria for inclusion in the National Register of Historic Places. It is recommended that measured drawings be made of these structures by NAER, and that, if possible, the structures be preserved in place.

#### THE PIGGOTT-WIGGINS FERRY COMPLEX (S-674)

The evolution and growth of the Piggott, and later the Wiggins, ferry operations has been detailed in Chapter V, The Historic Background. The Piggott ferry established by James Piggott in 1795 served as the nucleus around which early settlement became established on the Illinois side of the river. The Piggott ferry building complex, consisting of two log structures, is located on Figure 3a.

After Piggott's death in 1799, the ferry passed eventually into the hands of Samuel Wiggins in 1819, who established a near-monopoly to St. Louis backed by a large landholding on the east side riverfront (Figure 6). Beginning about this time, settlement on the east side became divided into Illinoistown, established in 1817 and located east of Cahokia Creek, and the Wiggins ferry complex, located between Cahokia Creek and the Mississippi River.

Wiggins ferry consisted of the ferry landings and buildings associated with the ferry company, and a host of support businesses such as blacksmith shops, stores, taverns, inns, and stables that were located on the riverfront to serve the ferry company and clientele. An 1843 survey of

Bloody Island depicts St. Louis, Illinoistown, Bloody Island, and several buildings located on either side of "the new ferry road" that are the Wiggins ferry complex (Figure 10).

The complex consisted of a blacksmith shop, boarding house, stable, two grocery stores, and a dwelling. The Wiggins ferry complex was only part of the extensive commercial development that existed west of Cahokia Creek. Plate 1 depicts the extent of settlement at the ferry landing in 1841, distributed primarily in a parallel direction to the river and west of the creek.

The St. Louis harbor improvements between 1844 and 1851 resulted in the diversion of the river west of Bloody Island and the annexation of the island to the mainland with road dikes by 1857. As the old river channel began to fill with sand, the ferry and other business interests relocated to the west end of the island, forsaking the landlocked former mainland ferry landing.

Of the two ferry complexes, the Piggott ferry structures (Figure 3a) were apparently washed away by Cahokia Creek (compare overlay Figures 4, 5, and 6). The Wiggins ferry complex and other remains of the once vibrant commercial community at the landing were also impacted some by creek and river movement. To a large degree, however, remains of this site are probably preserved beneath landfill in the area of the old Illinoistown Roundhouse (Figure 3a), and the portion of the old mainland located south of Illinoistown under the Interstate 55/70 interchange.

#### Archaeological Testing at the Wiggins Ferry Complex

Archaeological investigation of the Wiggins ferry complex is complicated by the result of years of land modification, first by the encroachment of the Mississippi River during the first half of the 19th century, and then, following diversion of the channel, years of filling and railroad development. Therefore, the investigative strategy consisted of the extrapolation of locational data from historic maps to the present geomorphological characteristics. This approach, of course, hinges on the accuracy of the historic maps in depicting the ferry site in relation to several topographic and economic references that have remained constant over time.

The common reference points on many historic maps and contemporary maps are the old Wiggins Ferry property lines first indicated on the 1843 Cram-Winklemeier map (Figure 10). The same property lines can be found on the 1874 Warner and Beers map (Figure 13), a 1935 city map by Hollman and Hollman, and the 1954 and 1974 photorevised Granite City USGS 7.5 minute quad maps. These property line reference points, used in conjunction with street references, township range designations, or French common-field boundaries, provide the best system of checks when locating historic features. It became obvious after our exercise in developing the overlay maps that a system of crosschecks utilizing several reference systems is preferred over a reliance on one set of reference guides.



This was the method used in locating the Wiggins ferry complex. The two sets of references in this case were the Wiggins property lines and St. Louis street patterns (Illinoistown streets were not used because of an error in the original map that resulted in Illinoistown being plotted 25 degrees out of true alignment).

Based on the map study, the potential location was defined and the area was archaeologically examined. This area is located southeast of the corner of Trendley and Front Streets and adjacent to the Illinois Central Gulf railroad tracks, just west of the elevated MacArthur Bridge approach. The initial examination revealed that the nature of the fill eliminated any possibility of hand augering through the overburden, so a backhoe was employed to investigate the deep deposits.

Five backhoe trenches were excavated to a depth of 10 to 20 feet (Figure 30). The length of the units varied between 20 and 40 feet. The trenches were aligned roughly northeast by southwest, perpendicular to the layout of the complex, in order to optimize chances of locating at least a portion of the complex. Artifacts were collected from the backhoe bucket and trench wall stratigraphy was examined for cultural levels. However, because of the steeply sloping stratigraphy and unstable trench walls, it was often difficult to maintain provenience of artifacts and so only a sample collection from this investigation was retained. The unstable fill levels in the trench walls, which were always slumping, also prevented careful mapping and photography of these trenches. All recording of the Wiggins ferry site trenching was therefore done from the ground surface for safety reasons. For the most part, the nature of the fill and the stratigraphy was similar for adjacent trenches, but varied for widely spaced trenches. Trench 5, however, uncovered the remains of an intact railroad spur associated with the Terminal Railroad Association's Wiggins yard near the surface, and was halted before any stratigraphic information could be retrieved.

Test Trench 1, like the other trenches excavated in this vicinity, revealed stratified fill deposits sloping steeply (greater than 45°) from north to south. A large amount of the fill in this trench was red brick rubble and wood that underlay dark clay loam at about 6 feet below surface and extended to the bottom of the trench. Railroad ties and mortar were recovered just above the gray clay at 17 feet below surface.

Test Trench 2 was similar to Trench 1, with large amounts of red brick, some mortar, and window glass that was closer to the surface, however, and ended at 7 feet below surface. On the north wall, the trench profile had the following stratigraphy: from surface to .8 feet below surface, dark brown loam; .8 to 1.4 feet below surface, brown silty sand with pebbles; 1.4 to 17 feet below surface, dark brown clayey loam with rocks; 17 to 19 feet below surface, gray clay. Artifacts recovered from the dark clayey loam level included a bottle with a maker's mark of 1951, which is the terminus post quem for this level.

Test Trench 3 contained fill layers similar to those in the other tests; however, the stratigraphy was nearly horizontal. From north to south along the long axis of the trench, these levels consisted of dark

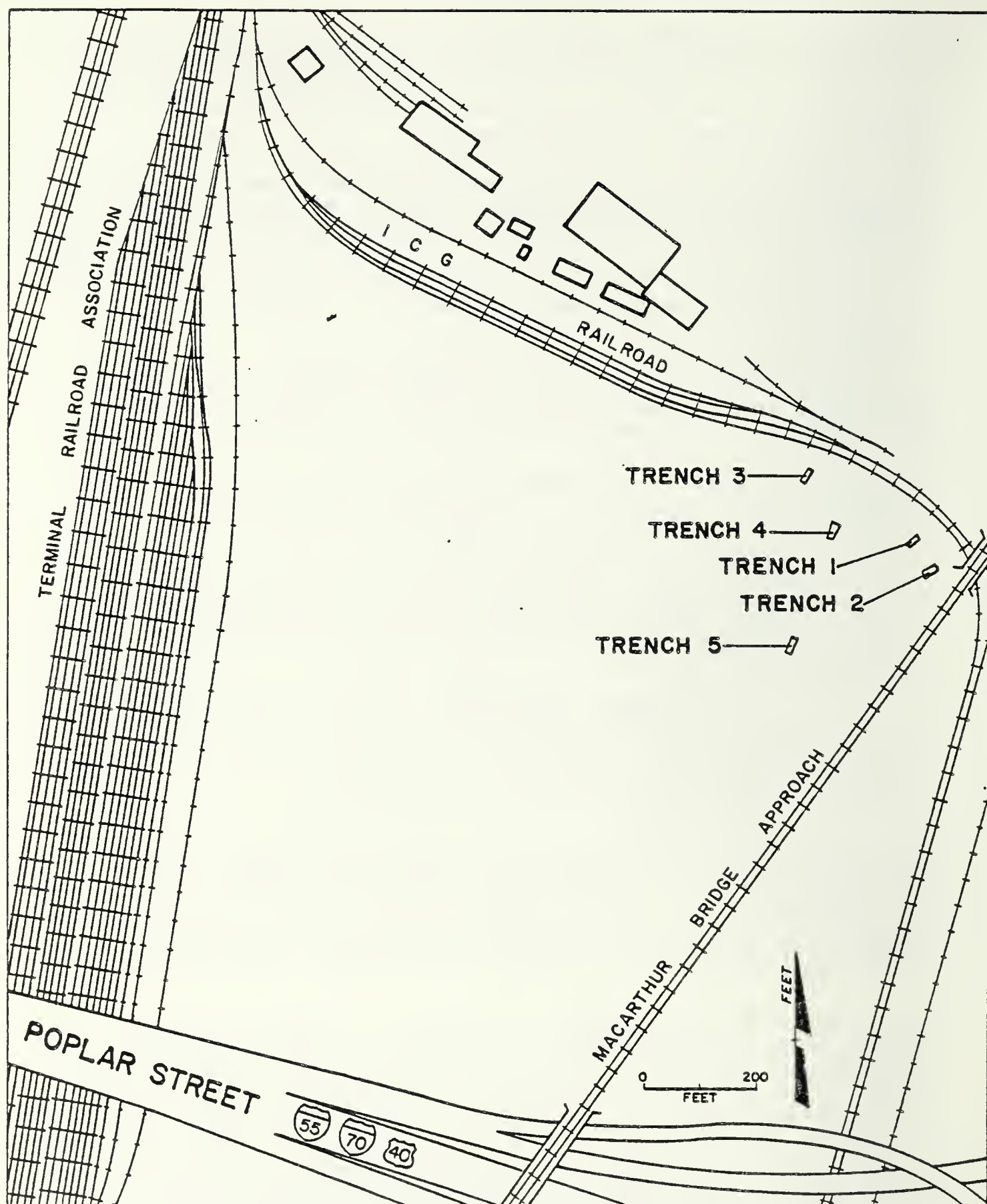


FIGURE 30. Plan of Archaeological Investigations, Piggott-Wiggins Ferry Complex.



gravel loam, tan silty clay with pebbles, dark brown clay loam with rocks and pebbles, and, between 15 and 17 feet below surface, the gray clay that signifies the slough or creek bottom level. No artifacts were collected from this trench.

Test Trench 4 had a brick and rock rubble layer extending from surface to approximately 2.5 feet below surface, on the north wall. Underlying the rubble level was dark clay loam to 6 feet below surface that was followed by reddish brown clay extending from 6 to 14 feet below surface. The test was halted at this depth.

Artifactual material recovered from the dark clay loam and reddish brown clay layers 8 to 14 feet below surface included ceramics (ironstone, pearlware, porcelain, creamware, and earthenware), container glass, and other cultural material (Appendix A). The container glass provided the narrowest and latest range dates for this level, with dates clustering around the first decade of the 20th century, though certain ceramic types (pearlware and creamware, for instance) might suggest an earlier date for this level.

The results of the backhoe trenching were generally indicative of mid-20th century landfilling activity, with fill extending from the surface to a depth of 18 feet below surface. Below the fill, the deposits consisted of gray sandy clay, usually indicative of ponding. No intact cultural deposits were located in any of the test trenches.

In retrospect, we can see that the negative results came about as a result of our choice of test locations. The problem was that two sets of railroad tracks used by the Illinois Central Gulf Railroad, as well as the elevated MacArthur Bridge railroad approach, cross the area of investigation at the most optimal area for locating the Wiggins ferry. Because of the necessity of keeping a safe distance from railroad tracks when doing deep excavation, the decision was made to conduct all testing west of the ICG tracks, since the area east of the tracks was underneath the Illinoistown Roundhouse and shops. As it turns out, the area that was deep tested is within the old channel of the Mississippi River, which suggests that the Wiggins ferry complex is further eastward, probably underneath the ICG tracks and the Illinoistown Roundhouse and shops. Since the Wiggins ferry complex, if still intact, is buried at or near the roundhouse complex, the site will not be impacted by construction activity west of the MacArthur Bridge approach. Further investigation of the site should concentrate, therefore, east of the approach. The final recommendations for the Wiggins ferry complex will be discussed in the Summary and Recommendations. Even though the deep testing failed to uncover evidence of the ferry complex, the results can add to an understanding of the old channel landfilling activity that completed the process of joining Bloody Island to the mainland.

An account of the early efforts to link the island with the mainland are documented in Chapter V, The Historical Background. A brief sketch of the landfilling history of the old channel as revealed by an examination of topographic maps and aerial photos will help place the results of the archaeological investigation in a proper perspective. The attachment of the island to the mainland was begun in the 1830s by Lieutenant Robert E. Lee,

who supervised the construction of dikes to divert the river westward (Figure 5). By 1857, a road dike had been constructed successfully from Illinoistown to the island (Plate 2) and the river diverted west of the island. Other dikes were completed in 1862 (Missouri Avenue) and 1875 (Trendley Avenue). Also, by that time, the railroads had successfully crossed the old channel on causeways and trestles. However, for many years, the old channel persisted as a slough fed by Cahokia Creek and was a nuisance to the Bloody Island inhabitants during high water, since the system of levees on the waterfront was designed for opposing only river-oriented floods.

Up to this time, the old channel was elevated only along road dike and railroad arteries. How deep was the channel between these dikes and trestles? There are good data available on channel depth from the accurate engineering maps and notes compiled by Lt. Lee during the St. Louis harbor improvements of the 1830s and 1840s. The original map of the harbor of St. Louis from which Figure 5 was drawn includes channel soundings along several transects between St. Louis and the Illinois shore. Four transects of soundings taken between the east shoreline of Bloody Island and the Illinois shoreline reveal the channel bottom topographic configuration.

The Mississippi channel on the east side of Bloody Island was 1200 to 1400 feet wide at this time, with the deepest part of the river, the cutting edge, located adjacent to the Illinois shoreline. The soundings indicated a moderately deep bottom between the island and the mid-channel point, with depths ranging from 5 feet near the island to 10 feet in the middle. At that point, the bottom dropped dramatically between mid-channel and the Illinois shoreline, with depths ranging from 18 to 30 feet deep. Below the southern tip of the island, beyond the influence of the island, the channel depth was below 30 feet along the Illinois shoreline to just south of the mouth of Cahokia Creek (Figure 5).

The transects of soundings indicate both the extent of island deposition below water surface at this time and the degree that the main channel east of the island was scouring the Illinois shoreline. The channel depth 600 feet downstream (south) of the dike transect, where deep testing was conducted for the Wiggins ferry site, cannot be determined, since in 1837 this location was still dry land. On Figure 5, this area would be at the most southerly structure shown between the river and Cahokia Creek. However, assuming an even trend in river morphology, this location would probably have developed a channel with a depth of more than thirty feet. Corroborating evidence of this depth is an historical reference to the first road dike construction at the foot of Brady Street, which mentions that the dike crossed water that was at one point 40 feet deep (Reavis 1876:60-61).

After 1844, there is a lack of cartographic information until the Army Corps of Engineers navigation charts of the late 19th century. The 1876 to 1881 chart for the St. Louis vicinity depicts the East St. Louis waterfront and shows clearly the old channel, Cahokia Creek, and the road dikes and railroad causeways that cross this low area (Figure 9). Elevations



along the channel and creek south of Trendley Avenue ranged from around 396 to 406 feet MSL. Elsewhere along this old channel, which was labelled as willows or standing water, elevations again clustered around 404 MSL for the channel bank. Two railroad tracks crossed the channel south of Trendley in the study area. Topographic lines indicate that the Mobile and Ohio tracks (ICG) and the Terminal Railroad tracks crossed the channel on trestles that connected the tracks to earthen embankments at elevation 420 feet MSL, carrying them to the island proper.

By 1909 these railroad channel crossings had changed very little, though the creek had been diverted further south to make room for the Wiggins Ferry Roundhouse (Figure 7). The construction of this railroad facility necessitated the first large-scale landfilling in the channel south of Trendley to an elevation of 420 feet MSL. The exact date of landfilling and construction for this facility is not known, though it is believed to have occurred sometime prior to 1905. This landfilling was confined to a triangular area bounded by the Terminal Railroad yard near the levee on the west side, the Terminal Railroad yard on the northeast, and the old channel on the southeast. In addition, there was some landfilling at the southwest corner of Trendley and Front Streets at this time for the railroad facility located there (Figure 7).

In 1909, the East Side Levee and Sanitary District, established to solve the flood problem, proposed a system of high levees, drainage canals, and landfilling. The plan of the East Side Levee and Sanitary District makes reference to the low ground in the area of investigation:

"The project also contemplates the filling of about 200 acres of low ground to the south between Trendley Avenue and the Pittsburg Dyke...It is quite evident that this method of filling, once successfully applied in the vicinity, will lead to the filling and raising by the property owners of the entire territory below grade west of Cahokia Creek for several miles above its present mouth, eliminating all the slough in that territory" (Sexton 1910:14-21).

It is not known whether the degree of landfilling in the channel envisioned by the district was ever carried out. The 1928 aerial survey of the Mississippi River by Major John G. Gotwals does not indicate any additional landfilling south of Trendley Avenue and west of Cahokia Creek. The absence of the Wiggins Roundhouse and shops by this date suggests a shifting of railroad use from this location. Perhaps landfilling priorities also shifted with abandonment of this area by the Terminal Railroad for all but railyard expansion. In other locations along the old channel, landfilling appears to have been very localized and restricted to railyard expansion. Landfilling was done in response to a specific need to elevate a building or railroad rather than filling for the purpose of landscaping.

Examination of the 1939 aerial survey of the Mississippi River by Major W.A. Snow indicates that very little landfilling had been done south of Trendley Avenue other than construction of the Municipal (MacArthur) Bridge railroad approach, which is located parallel and east of Cahokia Creek. This bridge approach was elevated on a trestle, and examination of the aerial photograph reveals a band of light fill laid under the approach,

presumably to provide good drainage around the trestle footings.

The next aerial photograph available for study is a 1959 series survey. By this date, a substantial amount of landfilling had been done in the old channel throughout the length of Bloody Island. The area of the deep backhoe investigation had been completely filled from the ICG railroad tracks on the north to the old Wiggins Roundhouse spur track on the south. There had also been landfilling and grading of the old channel on both sides of the MacArthur Bridge railroad approach, though the landfilling appears to have been only to the extent needed to eliminate ponded water. There was very little landfilling done in this location for the next twenty years. The 1978 series of aerial photos show this location largely unchanged from 1959, with the exception of some landfilling done in conjunction with the Interstate 55/70 construction. At the time of the field investigation (summer 1980), however, this area south of the old Wiggins Roundhouse railroad spur had been filled to its present elevation and landfilling was still going on south of the Poplar Street Bridge.

#### THE RAILROAD DUMP (S-669)

The railroad dump is located south of the Poplar Street Bridge, on the west bank of a closed slough that is a remnant of Cahokia Creek (Figure 3b). The site consists of deposits of predominantly ceramics and bottle glass distributed for 150 feet along the creek and extending west 100 feet toward the Terminal Railroad Association's Wiggins #5 yard access road. Preliminary investigations by ISU showed that the site contained railroad dining ware refuse from several railroad companies. The material was dated to the early 20th century (Smith and Lange 1980:77-81).

The site is located in an area that has been subject to much landscape alteration over the years. In the mid-19th century, this area would have been situated in the middle of the east channel of the Mississippi River in water over 20 feet deep (Figures 4, 5, 6). After construction of dikes and diversion of the river, this location experienced some accumulation of sand and silt as the new channel stabilized against the west shoreline and the east shoreline advanced to the west edge of Bloody Island.

During the settling-in period of the railroads on the east side, the course of Cahokia Creek was subject to the landform changes wrought by the construction of railyards, channel crossings, and engine facilities. The new land configuration, which placed the mouth of Cahokia Creek further south at the location of the railroad dump, occurred between 1881 and 1909 (compare Figures 9 and 7). This change in the creek was related to the construction of the Wiggins Ferry Roundhouse and yards (Figure 3b). Since then, the old channel and the creek have been subject to some landfilling associated with the construction of the MacArthur Bridge railroad approach and the Poplar Street Bridge (Figure 8), resulting in the creation of closed sloughs where the creek has been segmented by this construction. By 1978, two sloughs existed south of Trendley Avenue on either side of the Poplar Street Bridge. At the time of the field investigations in 1980, the north slough had been filled, leaving only the southern slough, a body of water



700 feet long by 120 feet wide.

Sometime prior to 1964, landfill material was deposited in the old channel west of the southern slough. The 1964 aerial photo of this area depicts this as relatively recent fill (there is scant vegetation) that had been graded. The railroad dump material was deposited at the edge of this recent fill and was not graded. The topographic configuration suggests disposal from the pre-1909 landfill surface into the old channel. The period during which the railroad dump material was deposited cannot be accurately determined from the aerials other than the supposed post-1960s date. The date of deposition of the railroad dump material can be better determined archaeologically. Bottle glass is the most sensitive indicator since bottles, especially 20th-century bottles, are rarely recycled and are deposited in the trash soon after use. In addition, bottle styles and maker's marks have changed so rapidly over the years that the date of deposition of such artifacts can often be pinpointed to within a few years. In the railroad dump, much of the bottle glass dates after 1930, with one bottle located on the surface dating to 1965, though this might have been a recent throw-away. The 1945 to 1965 range appears to be the most conservative date after which the material was deposited.

#### Archaeological Testing at the Railroad Dump

The area of the railroad dump was tested archaeologically to determine the date of its deposition, its areal extent, and to collect a representative sample of the artifacts deposited there. Because the site is composed essentially of a surface deposition, a selective, controlled surface collection was conducted across the site prior to the excavation of the test units. The site was divided into three collection transects that each measured approximately 100 feet east-west by 50 feet north-south (Figure 31). The collection area was bounded on the west by a Wiggins #5 yard access road, and on the east by the steep slope of the Cahokia Creek slough. The north and south limits of the collection area were determined by the extent of the surface scatter. The surface collection was designed to retain a representative sample of the available artifacts. Had a 100% collection been made, the volume of artifacts, many of which were identical, would have been staggering. The results of the surface collection indicated that the greatest density of cultural material was located in Collection Transect A, with the amount of artifacts becoming more and more scattered to the north. This variation in artifact density was probably the result of differential degrees of dumping.

Upon completion of the surface collection, two five foot-square test units were excavated in Collection Transect A to determine the depth of deposition, as well as to discover whether discrete levels could be observed within the site, thus indicating the presence of more than one dumping episode (Figure 31). Test Unit 1 was located near the southern edge of the site. The test unit was entirely excavated in arbitrary levels, because no changes in stratigraphy could be noted throughout the excavation. The unit was excavated to a depth of six feet below surface, where sterile soil was encountered. The unit consisted of a very dark brown loam matrix that was mixed with gravel and clinker. The amount of cultural material within the unit was surprisingly sparse considering the depth of the excavation, and consist-

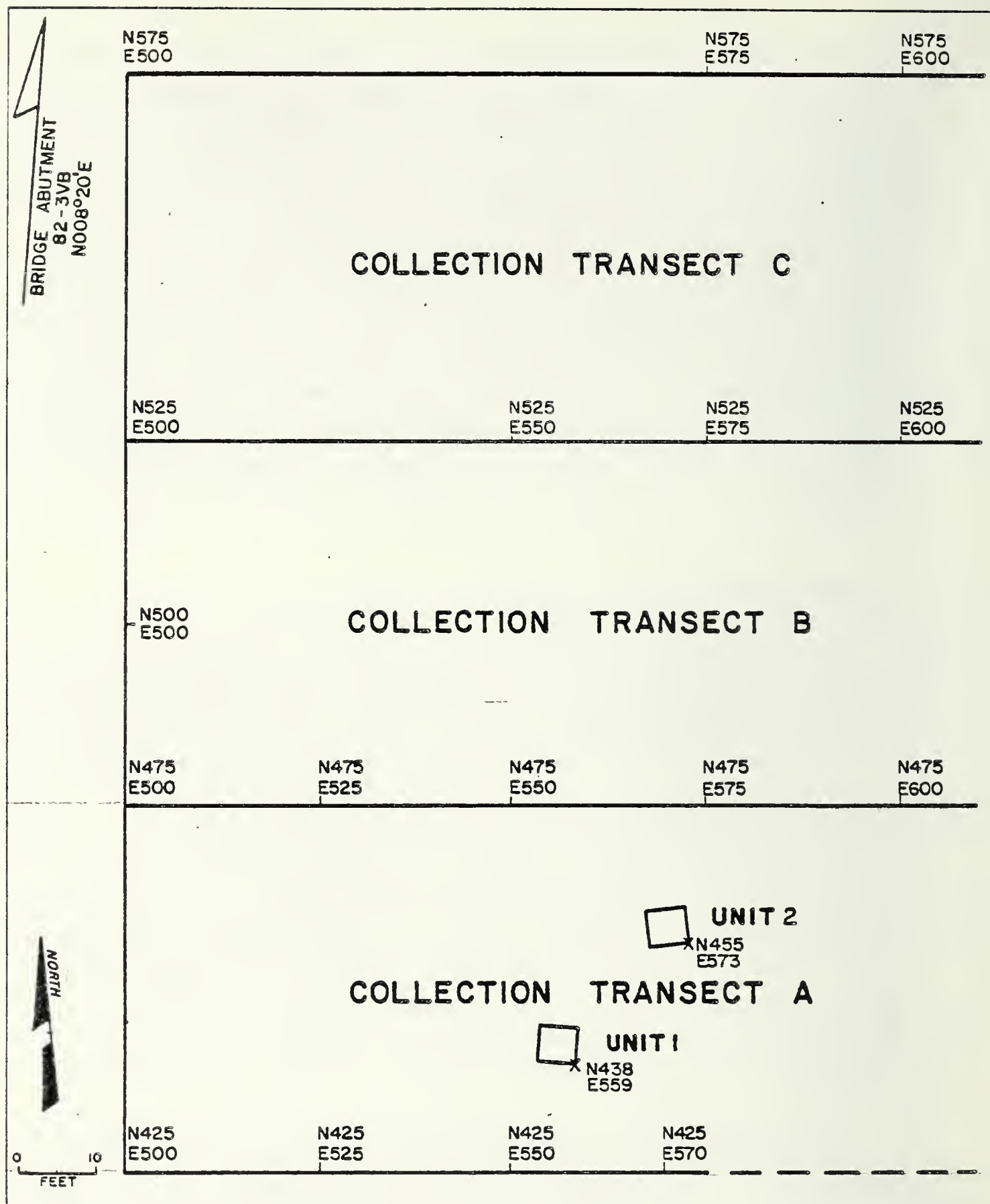


FIGURE 31. Railroad Dump Site Plan.



ed of some ceramics, bottle glass, butchered bone, a lot of structural material, and other assorted artifacts (Appendix A).

Test Unit 2 was excavated to the north and east of Test Unit 1, in an area that was judged to have the greatest density of artifacts within the site. The entire unit, which was excavated to a depth of five feet below surface, consisted of an enormous amount of cultural material deposited in a thin soil matrix of brown sandy loam mixed with cinders and clinkers. A comparison between the two units of the density of artifacts per cubic foot indicates that Test Unit 1 had an average artifact density of 1.43 artifacts per cubic foot, while Test Unit 2 had a density of 44.71 artifacts per cubic foot. Artifact types included ceramics (mostly porcelain), a large amount of bottle glass (95 whole bottles and 3391 fragments), other types of containers, butchered bone, structural materials, clothing and personal objects, and others (Appendix A).

An analysis of the artifacts recovered from the railroad dump provides an interesting insight into the range of dining ware types used by the railroad companies during the late 19th-/20th centuries. The majority (85%) of the ceramics recovered from the site were porcelain, although other ceramic types (ironstone, whiteware, earthenware, and yellowware) were also represented. Surprisingly, only nine different types of porcelain predominated within the collection. Type 1 is a buff colored, hard paste porcelain with the maker's mark "ADOBWARE." This was a thick utility ware decorated with three concentric underglaze bands in black, white, and black. Type 2 is a white, soft paste porcelain with a rim design in black or dark blue overglaze transfer. Some of these pieces were decorated with an Alton Railroad emblem. This ware was manufactured by the O.P. Company, Syracuse. The Stearnes Company in Chicago furnished a ware to the B&O Railroad that was manufactured by Shenango China, from New Castle, Pennsylvania. This ware (Type 3) is a soft paste porcelain with an overglazed gold transfer design consisting of two concentric bands and the B&O emblem. Type 4 is an off-white, hard or soft paste porcelain with an underglazed transfer design around the rim. The maker's mark for this ware stated that it was "Old Ivory, OP Co, Onondaga Pottery Co, Est. 1871" (Plate 31a). Type 5 is an unmarked hard paste porcelain with dark green glaze on the exterior. Another type (Type 6) of ceramic used by the B&O Railroad was manufactured by Scammel's Lamberton China as a commemorative plate in 1927 (Plate 31a). The commemorative plates were designed to honor the B&O's centennial, and were either hard or soft porcelain with a blue underglazed, transfer-printed design. Type 7 is interesting in that it is a soft paste porcelain ware that is characterized by its rim design of underglaze, transfer-printed concentric bands and fillets, but was manufactured by three different companies for the Pennsylvania Railroad (Plate 31b). The three companies were Scammel's Lamberton China; the O.P. Company, Syracuse; and Shenango China, New Castle. Type 8 is an unmarked ware that was manufactured for the Missouri Pacific Railroad. It is a soft paste porcelain with an underglazed, transfer-printed floral design. The ninth type is a soft paste porcelain, heavy utilitarian ware with the word "Hall" printed in green underglaze. It is not known to which railroad company this ware belonged.

The many types of container glass that were recovered from the railroad dump indicate the general "throw-away" nature of bottle glass during the 20th century. Still, several manufacturers seem to have predominated within the collection. These included the soft drink bottler Owens-Illinois



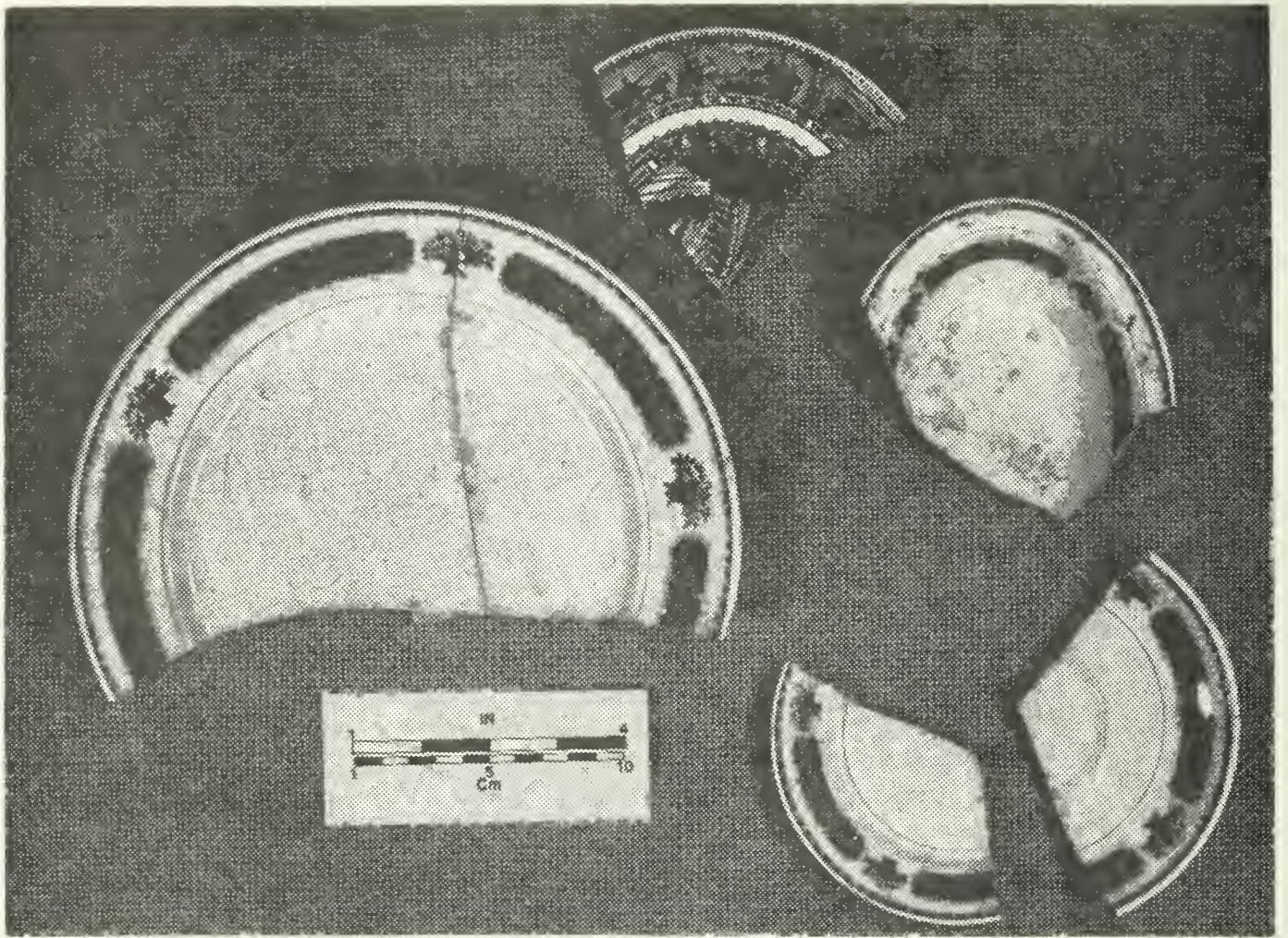


PLATE 31. A. Ceramics from the Railroad Dump Site.

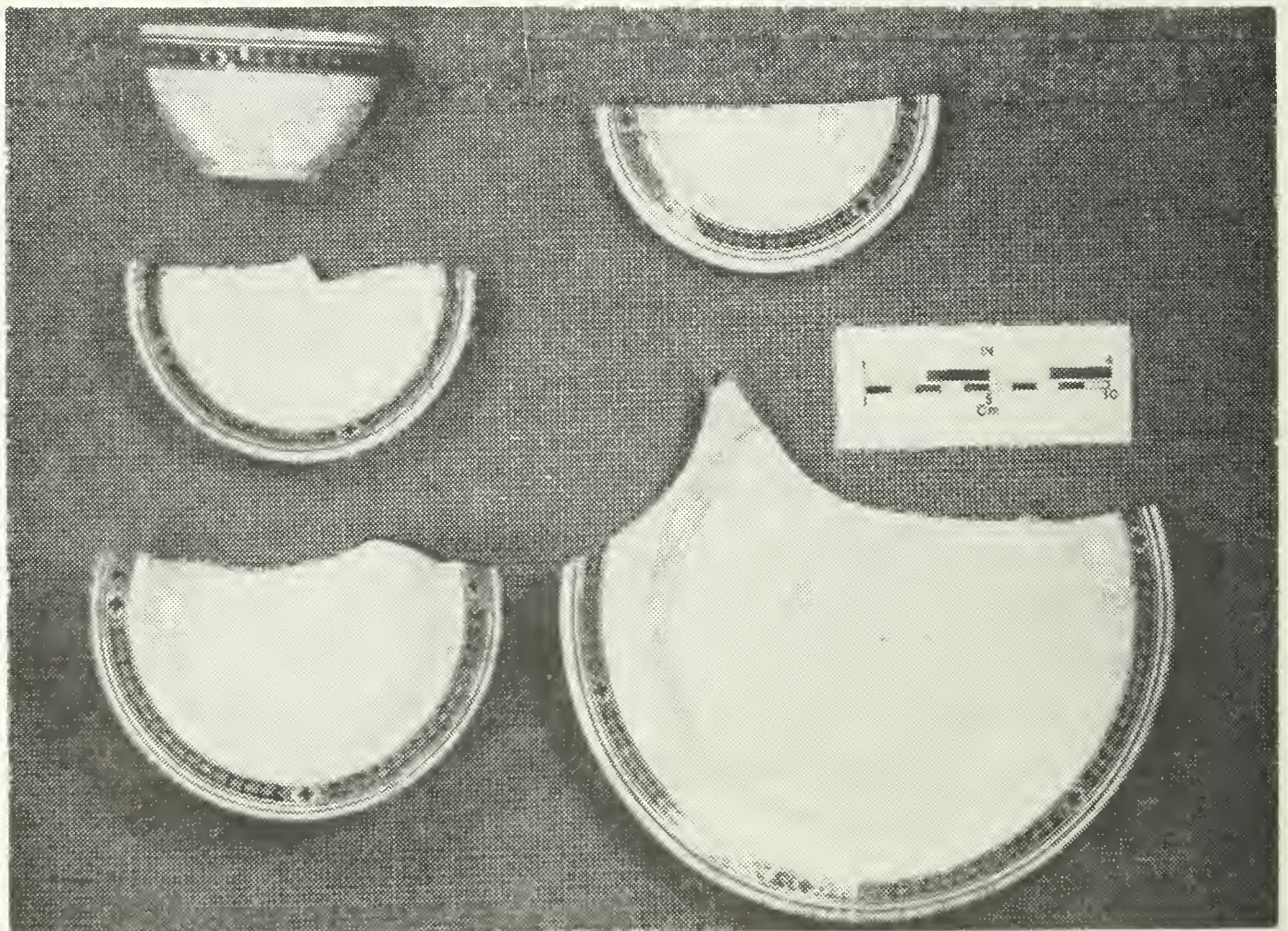


PLATE 31. B. Ceramics Made for the Pennsylvania Railroad, from the Railroad Dump Site.



(with factories in Charleston, Streater, Alton, Charlotte, Fairmont, and Columbus); the Hazel-Atlas bottling company; Davy and Moore, Ltd.; United Glass Bottle Manufacturers, Ltd.; Forster Glass Company, Ltd.; as well as lesser amounts of identifiable glass from the Maryland Glass Company, Ober-Nester Glass, Ball Canning Company, H.J. Heinz and Company, Pierce Glass Company, and others. The contents of these bottles and jars included soft drinks, "Perrier" water, "Bromo-Seltzer," "Pepsodent Antiseptic," "H&H," liquor, and catsup.

The earliest datable bottles were those manufactured by the H.J. Heinz Company that range from 1888 to the present. Many of the containers have date ranges that extend from the turn-of-the-century to the present. However, a few have relatively restricted date ranges, thus providing an indicator of when certain types were being used. Owens-Illinois in Columbus made a container for "Pepsodent Antiseptic" from 1930 to 1948. The Forster Glass Company bottles that were recovered date to between 1903 and 1940. There was one fragment of a "Coca-Cola" bottle recovered that was patented in 1915, and was in production only until 1923. Finally, the Pierce Glass Company made containers for "Milshire Dry Gin" only between the years of 1905 and 1917.

In summary, the railroad dump site provides a fascinating insight into the types of ceramic wares and bottled goods that were being used by various railroad companies during the first half of the 20th century. Unfortunately, the site has been documented both through the archaeology and through oral history to have been of secondary deposition. It is not known from where the artifacts originated. Local Terminal Railroad employees suggested that the material may have originated from a Terminal Railroad complex located in the vicinity of Front Street and Trendley Avenue (personal communication 1980), although this does not explain the presence of marked artifacts from different railroad companies. In any case, it appears that the material obtained from the testing operations at the site will constitute an adequate sample for purposes of documenting the entire site, and no further investigation is warranted. The site does not meet the criteria for inclusion in the National Register of Historic Places.

#### COMPONENTS OF THE RAILROAD SYSTEM

The components of the railroad system are those structures and facilities in the industry that function as an integrated assembly line for the transportation of commodities or people through and between railroad companies and other transportation sectors. These components may include freight-house facilities, roundhouses and repair shops, passenger depots, water and fueling stations, railyards, mainline tracks, their construction, operation, and maintenance facilities, and many others. The organization of these attendant services may vary from railroad to railroad, and may differ geographically depending on proximity to railroad hubs and size of the local rail operation for a particular railroad company. East St. Louis, being the nexus for a number of transcontinental railroads and smaller lines, has a concentration of facilities, especially terminal facilities. East St. Louis was historically a terminal point on the railroad network because the Mississippi River was a logical place for eastern railroads to end their lines, St. Louis

served as a major collection and distribution point for the western region, and the river made continuation of rail lines from east to west difficult. Facilities most often associated with terminal stations in East St. Louis are freighthouses, roundhouses, and shops.

Before this discussion goes on to descriptions of specific railroad structures, a general background discussion of these facilities, their layout, and operations is necessary. For purposes of this discussion of the railroad components, the following descriptions will be based on late 19th-century railroad structures. In this way, a perspective on the railroad facilities will be provided that sets the level of technology and layout of the early railroad freighthouses, roundhouses, and shops in East St. Louis. Twentieth century technological innovations and economic changes in the railroad industry, which brought about modifications in the operation and organization of these facilities, can then be referenced in relation to specific railroad sites to be discussed later in this chapter.

## FREIGHTHOUSES

In terms of size and operation, railroad freighthouses can be divided into local freighthouses or terminal freighthouses. Local freighthouses, located at intermediate points along a railroad, were usually small structures intended for the handling of incoming and outgoing freight for a restricted area. Terminal freighthouses, in contrast, were bigger and handled a much larger volume of both inbound and outbound freight, and often involved a more complex system of distribution of the shipment via other transportation modes over a large market area (Berg 1893:202-205). The East St. Louis freighthouses can all be considered under the latter class of facilities.

The accommodations for the handling of freight at a terminal location varied depending on the rate of flow of inbound and outbound freight, the storage time and maximum amount of freight being handled at any one time, the kind of freight being handled, and the modes of transportation used to move the freight. Among the considerations in designing a terminal freight-house building were the track layout, the kind of freight handled, the class of building material available in each section of the country, local building codes, and the economic status of the railroad. In general, wooden frame buildings on limestone foundations with roofs of tin, slate, or composition gravel were the norm for the East St. Louis freighthouses, though by the early 20th century, buildings of brick for the larger railroads were evident. The plan of a freight-house generally included an office at the front of the building facing the main vehicular thoroughfare, with the freight-handling facilities extending back. A side road for wagon pickup was usually located on one side and railroad tracks on the other side.

In East St. Louis, the amount of freight handled required long freight-houses, often two-storied, so that incoming freight needing long storage time could be moved out of the way. The bottom floor where freight was handled was generally divided between inbound and outbound freight, with inbound requiring proportionally more space than outbound. Sometimes these two functions were separated into two buildings, each one devoted specifically to



either outgoing or incoming freight. To accommodate railroad and wagon transfer of freight, each side of the freight house was equipped with sliding doors. On the track side, the doors were usually spaced to correspond to the size of the sliding doors on freight cars, and on the road side were spaced as appropriate to permit wagons to back up to the doors for unloading or loading goods for consignment.

Incoming freight that was arriving at a freight house for local distribution by wagon was generally unloaded promptly and stored in the freight house until it was picked up by the consignee. Therefore, inbound facilities generally needed less track space, but more freight house space, than outbound freight. Outgoing freight, in contrast, was usually brought to the freight house in wagons for immediate rail shipment and could be loaded onto cars with little storage time. As a result, outbound freight facilities used less freight house space, but required more trackage so that a number of railroad cars destined for different stations could be handled simultaneously (Berg 1893:205-206).

In order to increase the track space for outbound freight, a platform annex with a track on one side and a wagon road on the other was frequently used, especially for large package freight to be handled without passing through the freight house. The freight could be tallied and weighed on a platform scale and kept separate from other freight requiring special handling and storage. In some cases, two parallel railroad tracks were located on one side of an outbound freight platform with a wagon road on the other side of the platform. In these instances, outgoing freight was required to pass over one line of cars to be loaded onto the railroad cars on the outer track (Berg 1893:206).

Freight platforms were planned according to the specifications dictated by the design standards of railroad tracks and freight cars, which were uniform in most respects from railroad to railroad. The height of the platform and distance from the nearest track were dependent on the height and width of the freight cars and doors, with the aim being to minimize the slope and distance between the platform and the car. Berg (1893), writing specifications for the late 19th century, noted that a general rule was to set the platform 3 feet 10 inches to 4 feet above the top of the rail, and 5 feet 3 inches to 7 feet away from the center of the nearest track. For safety, platforms were usually built to overhang their ground supports, providing a space for a person to seek refuge if caught on the ground between the platform and a train. The width of freight platforms often depended on the kind of freight being handled, with width varying between 6 to 12 feet wide (Berg 1893:235). The length of a platform depended on whether it faced a running track or a side track (a track with a dead end). In the former case, the platform could be as long as the freight house since cars could move successively opposite the house. In the latter, which was usually the case in East St. Louis, the freight platforms were long enough so that freight could be loaded and unloaded from cars without doing any shifting of the railroad cars (Berg 1893:236).

The preceding has been a brief summary of terminal freight house facilities common to railroads of the late 19th century. It should be noted that East St. Louis, as a major manufacturing center in the late 19th and early

20th centuries, had many specialized freight facilities corresponding to specific industries with a large enough production to warrant separate facilities. For instance, cold storage warehouses for keeping perishable freight such as meat and vegetables; stockyards, pens, and stables for moving livestock; grain elevators; and freighthouses for storing phosphates, cement, hides, lime, marble, fertilizer, and coal were common to the region. Each of these facilities had its own distinctive features and specifications that varied more or less from the general descriptions provided here.

## ROUNDHOUSES AND SHOPS

This component of the railroad industry included all the structures for engine cleaning, maintenance, repair, and servicing known collectively as roundhouses and shops. Individually, these structures were the engine house (roundhouse), machine shop, pattern shop, paint shop, blacksmith shop, repair shop, boiler house, cleaning house, coal house or tipple, oil house, sand house, ash pit, ice house, various tool and supply houses, and the office complex. These functions or structures may have operated independently on small roads or at points of minor importance on large railroad lines, but at the terminal station, they were clustered so that an engine could proceed systematically from one step in the process to another without delay and with contingencies for efficient bypassing of steps if appropriate. Because these functions may have operated out of individual structures or may have been organized into combinations as at a terminal station, the following description of the elements of the roundhouse and shop facilities will treat each structure individually, followed by a discussion of the layout of a roundhouse and shop facility and the internal arrangement of the structures for the most efficient operation of each site in East St. Louis.

### Engine Houses

Engine houses were used for housing and cleaning engines, routine maintenance, and repairs. These structures could be divided into polygonal houses (or roundhouses), and rectangular houses. Generally, the rectangular buildings were used for smaller operations and roundhouses were used for large facilities. Though basically they provided the same services, the differences between the two styles were more in how they were designed for transfer of engines in and out of the house and the interior layout of workspace.

Rectangular houses were most often used when facilities for a limited number of engines were needed. The design consisted of the building into which one, two, or more railroad tracks, often branching off a leader track, entered the house at one gable. The length of the house was dependent on the longest engine used or in excess of the length of two engines on the same track, and the width of the house was dependent on the number of tracks used. In some cases, tracks extended out of the other gable, perhaps connecting the house to another structure, a turntable, or simply as an emergency exit, especially if two engines were kept on the same track. Turntables were not



common at rectangular engine houses, though sometimes they were built to turn engines at facilities with limited space for turn-around tracks. In these cases, they were only indirectly connected with the operation of the engine house (Berg 1893:166-167).

For large rectangular engine houses, a transfer table was used to move engines from the leader track to the multiple engine house tracks that entered the building on its long side. A transfer table was a mobile section of track, longer than the maximum length of an engine, that ran on tracks set in a pit as long as the length of the engine house. The transfer table provided a link for the engine from the leader track on one side to the engine house tracks on the other side. The transfer table required less space than a turntable, but had the same disadvantage of creating a vulnerable link in the system that, on mechanical failure, would cause a serious blockade in the entire facility. In case of fire in the engine house and a breakdown of the transfer table, considerable property damage in the loss of engines in the building would also occur, although by use of a buffer zone between the transfer table and the engine house, the problem of loss by fire was eliminated as the engines could be removed from the building without using the transfer table.

For these reasons, rectangular engine houses often incorporated a track approach. In a track approach, the leader track branched off into multiple tracks, each of which led to a stall in the engine house. The advantages of the track approach were that delays from transfer table breakdown would not occur, the house was cheaper to build, and movement of engines into and out of the house was faster. A disadvantage of the track approach was that it took up considerable land as compared to the transfer table. An additional advantage of the transfer table system was that extension of the building was much easier and economical than was possible with the track approach system (Berg 1893:168-169). An example of the rectangular engine house with transfer table is the Terminal Railroad Association's Brooklyn shops (see Figures 41, 42, and 43).

By far the most common design for an engine house was a roundhouse with turntable. This design consisted of a polygonal house built around a turntable that connected a leader track to tracks leading from the turntable radially to the roundhouse. The roundhouse usually was not really round, but polygonal, with the circle being divided into stalls that were built radially around the turntable, one for each engine. The roundhouse could be built as a full circle, called a closed or full circle roundhouse, or it could be a segment of a circle, known as an open or segmental roundhouse. The extent of the circle was dictated by the number of engines serviced. It was customary to provide two approach tracks to the turntable of an open roundhouse and through two stalls of a closed roundhouse so that if there was a block on one track, the other track could be used. As a safety measure, special fire walls divided the interior of the building into several parts to retard the spread of fire. In addition, the roundhouse was usually built far enough away from the turntable so that in case of fire the engines could be run out of the stalls into the area between the house and the turntable. Also, extra engines could be stored between the house and the turntable when the roundhouse was full. Many roundhouses had circular shed additions between the roundhouse and the turntable for just this purpose.

Though some roundhouses incorporated a track approach instead of a turntable, it was only feasible where there was ample ground space.

The advantages of a roundhouse were economical use of ground space and good lighting at the front of the house, which was also the widest part of the stall and where most of the work was done on an engine. In addition, extensions could be built onto the roundhouse in sections with ease and without additional change in the design of the turntable. The disadvantages of a roundhouse were that it was more expensive and complicated to operate than a rectangular house, and a breakdown in the turntable could cause a serious blockade. Despite these disadvantages, roundhouses were by far the most common style of engine house in East St. Louis.

### Design and Operation of the Engine House

Whether the engine house was a roundhouse or of rectangular house design, there were several variations in the organization of the engine house when other maintenance services were combined in the same terminal facility or even within the same engine house structure. There were also several choices in the type of building material used in the construction of the engine house. The choice of building material used in the construction of an engine house was dependent on many factors, including the status of the railroad, size and layout of the engine house, available material, building codes, the local climate, and the time period. These descriptions are based on late 19th century specifications. Twentieth century innovations in technology and construction will be evident as modifications in old structures and the appearance of new designs in later facilities. Since it will be easier to describe the design variations and combinations of services in an engine house during the site-specific documentation, the following will briefly touch on some of the more common features of engine houses and how they were designed, while the integration of these features will be discussed later.

Probably the most distinctive features of an engine house were the turntable or transfer table, and the engine pits. The turntable functioned to link two sections of ground tracks (usually the leader track and the engine house tracks) by a link of track on wheels that ran on a circular railroad track in the turntable pit. Transfer tables and turntables were turned either by hand, steam, wire-cable, or electricity. The turntable or transfer table was made to accommodate the largest engine in use, as well as allowing for the probable increases in engine size within the life of the turntable. The table was constructed of wrought iron or steel plate-girder, and was built to withstand more than the weight of the largest engine in use or the possible increase in the weight of engines. The foundation of the pit was carefully constructed and anchored to the substrate, since settling of the central pier or foundation would prove detrimental. The depth of table pits varied. In northern climates, the paving of the pit bottom was kept well below the table so that snowfall would not halt operation of the facility (Berg 1893:172).

The engine pit was located in the engine house and consisted of a pit underneath the rails to facilitate inspection and repair beneath the engine, as well as providing drainage during cleaning of the engine. The pits were



generally built about 3 to 4 feet below the tops of the rails. They were built square at the ends and usually sloped toward the engine house entrance and the drain. The floor of the engine pit could be brick, stone, or concrete (with concrete predominating after the turn of the century) laid on a sublayer of brick or stone set in concrete. The foundations, side walls, coping, and rail fastenings of an engine pit were designed and constructed to provide a solid base for the engines and to hold up under years of stress from vibrations, weight, and corrosive elements. In the foundation construction, concrete, stone rubble, or stone paving grouted with cement was anchored securely into the ground. The side walls of the pit were also constructed with great care and secured firmly on top of the foundation. The side walls were built of stone or hard brick laid in cement mortar, and were 8 to 24 inches thick. The coping of the side walls was done in large stones, timber stringers, or iron plates secured to the side walls by anchor bolts. As an extra safety measure, some designs incorporated transverse walls or iron tie-rods and braces at intervals to connect the side walls, thus preventing the walls and rails from spreading. The rail fastenings varied with the nature of the coping of the side walls. On timber coping, rails were fastened with track spikes having reversed heads or screw spikes. If the rail was connected to a wrought iron plate, the plate was fastened with bolts, dowels, or clips. If stone coping was used, the rails were fastened with track spikes driven into wooden dowels that had been bedded into holes drilled in the stone. Another technique was to connect them with rag-bolts or split bolts having keys set with cement, lead, or sulfur in holes drilled in the stone. Still another method was to use iron rail chairs bedded in the side walls and spaced 3 to 4 feet apart on either side wall for rail support and anchor (Berg 1893:52-53, 172).

The engine pit tracks could be arranged around the turntable in a number of ways. One way was to space the rails at the face of the turntable so that they just barely touched each other, thus eliminating the need for frogs. The second method was to join the rails of neighboring engine stalls at the face of the turntable pit, though the disadvantage of this method was that the joint or frog was battered by engines as they passed from the table to the engine stall tracks. However, usually a combination of separate tracks, frogs, and crotch frogs were used to suit the needed engine stall angle, with joints placed far enough away from the table pit to reduce stress from the weight of engines (Berg 1893:174).

In most engine houses, the top of the rails on each side of the engine pit were level with the floor of the house. The floor of the roundhouse was constructed of cinders, cement, stone, asphalt, or timber. In terminal engine houses, the floor was generally of rough planks, two or three inches thick, set on mud sills and bedded in cinder, or a stone slab or concrete floor where heavy tracking was liable to wear out a plank floor. To allow proper cleaning and drainage, the floor of the engine house was dished towards the pits or gutters.

The drains were usually shallow troughs a foot or so wide that extended in a perpendicular direction across each stall pit. In roundhouses, they described a circle parallel to the arc of the roundhouse linking each engine stall to one drain. The drains discharged into a cesspool that overflowed into a box sewer extending around the building between the ends of the pits

and the wall of the building. Usually, box sewers were equipped with a cover so that periodically they could be entered and cleaned (Berg 1893:170).

As the layout and materials for the table and stalls of an engine house were varied, so was the superstructure of the engine facility subject to some alternatives in design. In the building of the engine house, both timber frame, and brick and stone designs were common. Frame buildings covered on the exterior with weatherboarding or corrugated iron, with roofs of tarred felt, gravel, corrugated iron, tin, or slate were common, especially before the turn of the century. More substantial buildings with brick or stone walls, iron fronts, and iron trusses roofed with slate or gravel were equally popular, especially at terminal yards where durable buildings were needed, and seemed to supersede frame engine houses after the turn of the century.

The right choice of building material was crucial in the roof design since the sulfurous gases from the engine smoke would quickly destroy many construction materials. A slate roof fastened with copper nails was durable, but required heavy-duty roof supports. Tarred felt or felt and composition gravel allowed for a lighter roof construction and would withstand the gases from the engines, but was not very durable against the outside elements. To provide proper ventilation, the roofs of the engine houses were provided with ventilators, usually at the peak of the roof. In addition, smoke stacks were located over each stall with a bell-shaped lower piece that could be lowered over the smoke stack of the engine to reduce the amount of exhaust fumes in the building. These stacks were generally galvanized iron or ceramic to withstand the corrosive action of the fumes (Berg 1893:167, 169).

The roof trusses in the engine house may have been iron, combination wood and iron, or wooden girders on posts. Wood was preferred over iron in some houses because it resisted corrosion better than metal, though where fireproofing was warranted in large engine houses, iron trusses were used. The roof support design was usually a triangular system with deck beam principal rafters and a tie-rod bottom chord, having a lateral bracing of light rods. The support posts or columns were located on either side of the engine stalls, and were usually set on cut stone base blocks or molded concrete blocks anchored firmly to the floor of the house (Berg 1893:173, 178).

### Auxiliary Buildings

Auxiliary buildings included the structures that are often appended to engine houses or at least situated near the engine house in a terminal facility, such as the machine shop, blacksmith shop, repair shop, boiler house, cleaning house, and others. The structures built to house these services, unlike an engine house design, varied considerably, making it difficult to generalize a building plan and layout. The following will briefly discuss the major structures that accompanied an engine house. A more detailed description will be included in the site-specific documentation later in this chapter.

The machine shop was where engine parts were reconditioned or repaired. It generally had machine tools for cutting, shaping, boring, milling, and



calibrating metal. The machine shop was almost always attached to the engine house and connected by tracks running through a stall, since repairs may have needed to be done in the engine house and parts removed and repaired in the machine shop (see, for example, the Wiggins Roundhouse and the Big Four Roundhouse, Figures 40 and 35). In large railroad facilities where such repair operations may have constituted a large part of the work, the machine shop was often located apart from the engine house with separate track access to provide more room and better access (see the Illinoistown Roundhouse and the Brooklyn Roundhouse, Figures 37 and 43).

Closely associated with the machine shop was the blacksmith shop, where parts were worked with a forge before the fine work was done in the machine shop. Since these two shops often worked in tandem, they were frequently located in the same building. Also connected to the machine/blacksmith shop were the repair shops where work was done on engine parts. Some facilities may have had a heavy repair shop and a light repair shop with each shop equipped for a particular task or engine component. In other cases, especially in early or small engine houses, the repair shop was a non-specialized work area associated with the machine/blacksmith shop. There does appear to have been a trend of increasing specialization within the railroad repair sector through time, so that by the mid-20th century, these facilities were broken down in relation to the systematic assembly-line approach to engine maintenance and repair.

A separate cleaning house was frequently associated with the engine house facility, even though engine cleaning could be done in the engine house. The cleaning facility may have been combined with a car shed structure, so that expensive cars could be protected from the sun and weather when not running (Berg 1893:46). This facility might have also been found at a passenger car repair and maintenance facility. There was no standard design for such structures, though a rectangular wood frame or brick building with tracks running through it, much like a rectangular engine house, was the most frequent style. Many railroads would utilize an abandoned engine house, machine shop, freight house, or other structure for cleaning and storage after the original use of the building was no longer needed (Berg 1893:47-50).

The boiler house was the power house of the engine facility. Fueled by coal, the steam boiler provided energy for the machines, air compressor, winches, and other motor-driven tools. It could also provide steam for heating the buildings. The boiler house was usually arranged with a track spur for access to coal, coal hoppers for storage of coal, and a room for the steam boilers. The structure was generally fire-proof, being constructed of brick and iron or steel.

Other buildings that could be associated with the engine house facility included the paint shop where the engine body and parts were painted or coated with anti-corrosive material, the wood shop where wood-working of cars was done, the tool and supply room where tools and spare parts were stored, and many other structures. Other vital components of the engine facility that will be discussed briefly include sand houses, oil houses, water stations, ash pits, and coaling stations. These buildings were very specialized structures for the supply of raw materials needed for running the engines.

Though some of the previously discussed auxiliary structures were more or less optional for terminal stations, depending on the route and organization of the railroad company, these supply structures were found at virtually all terminal engine house facilities, as well as at way stations along the route of a railroad.

### Sand House

Sand houses were needed to supply sand to engines to increase the friction of the driving wheels on the rails, especially on steep grades. The sand house had three functions: the storage of wet sand, the drying of sand, and the storage and distribution of dry sand. Dry sand was a necessity for use in the engines, or it would not run freely through the pipes leading from the sandbox of the engine to where it was spouted in front of the driving-wheels. Therefore, sand houses were provided at many stations along a route even where only a small amount of sand was needed, since it was difficult to ship dry sand from a central sand house without it collecting moisture along the way or while in storage.

The typical sand house was divided into three compartments. A large portion of the house was devoted to wet sand storage with openings on the side for wheeling sand in or, in a large facility, an elevated track for depositing sand from hoppers. From there, the sand went to the drying bin, usually a coal-burning stove with pans near the top or surrounded by a drum so that the heat was confined. Other systems used steam pipe grating so that the dry sand could filter down to the holding bin, or brick or stone flues underneath the sand house that dried the sand from below. The sand from the drying room was next screened to remove impurities and put into storage where it could be loaded by hand, conveyor, or elevator.

Structures for the housing of sand were wood frame, brick, or concrete, and depending on the design used, could be a substantial split-level building or a small, single-story house. Sand houses were located adjacent to a track leading to or from an engine house facility, yard system, or coaling or water station (Berg 1893:71-80).

### Oil House

Oil storage houses were used to store oil for lubricating engines and shop machinery, and for use in lamps for lighting engines, cars, buildings, and grounds. Oil supply houses had special designs to facilitate storage and access. The oils, either in barrels, casks, iron drums, or large iron tanks, were placed on a large shelf or cradle from which the supply was drawn through faucets. In some cases, where large amounts of oil were to be used in one place that was not convenient to the oil house (for instance, the machine house), then supply tanks could be placed in the main building. The oil house was usually located along a track leading to or from the engine house near the coal, water, and sand houses, both as a convenience for engines, and to remove a potential fire hazard away from the main complex.



The design of an oil house varied depending on the preferences of the railroad company and the local needs. They could be large brick structures or small timber frame buildings. Examples of this type of facility in East St. Louis will be given in the site-specific descriptions (Berg 1893:81-83).

### Water Station

Water stations for supplying locomotives were located an average of 10 miles apart on a track, depending on the traffic on that particular route. At engine houses, where the water station also had to supply boilers, car washing, etc., the holding tank had to be larger than at the way stations, or the railroad company had to tap into the city water line, if available.

The location of a water tank in an engine house facility was usually along the head of a track leading to or from the coal, oil, and sand stations. At large stations, a central water tank sometimes supplied stand pipes (tanks) located at strategic points of the yard.

The railroad water tanks of the late 19th century were circular, from 16 to 30 feet in diameter, and constructed of wooden staves and metal hoops. This design was popular because wood afforded better protection against water freezing than iron, and because of the cheapness of the construction and repair, which could be done in the machine/blacksmith and wood shops. The water tank rested on wooden posts set on stone piers with or without wooden sills (Berg 1893:113-129).

### Ash/Cinder Pit

Ash, clinker, or cinder pits were located along the mainline, at division yards, and at terminal facilities to allow the coal waste in the fire-box of an engine to be dumped. The design was similar to that of an engine pit, discussed earlier, except that provision had to be made in an ashpit for protecting the pit from the deteriorating influence of hot cinders.

The length and depth of the cinder pit varied depending on whether it was located on a side track or main track, the number and frequency of engines to be serviced at one time, and the frequency that the pit was cleaned. The width of the pit was determined by the gauge of the track and pit wall construction. The standard gauge was 4 feet 3 inches, so the pit had to be slightly narrower, depending on the coping and the method of fastening the rail to the coping.

As mentioned previously, the design of the cinder pit differed from an engine pit only in the care taken to protect the construction from the detrimental effects of hot ashes and water. The protection of the side walls was accomplished with a facing of fire-brick, or cast iron or wrought iron plates. Where an iron facing was used, an airspace was left between the iron and side wall to protect the wall from conducted heat (Berg 1893:51-59).

## Coaling Station

The railroad facilities for handling coal involved many specialized machines and structures for loading, unloading, storing, and supplying coal. This discussion will concentrate on the facilities in use for coaling engines, of which there were many variations. Berg (1893) discussed five methods for coaling locomotives in use during the late 19th century: 1) shoveling into the locomotive tender from coal cars, 2) crane and buckets, 3) shoveling from platforms, 4) chutes, and 5) other patented systems (1893:130-131).

The first method, shoveling from cars into engine tenders, was generally employed in a station with a small output or as a stopgap measure if more cost-efficient systems were out of order. The second method of using a crane and buckets to transfer coal from a storage pile or car to the tender was widely used. The system could be stationary with a swing-jib, or mobile with a traveling crane that moved on a trestle or tracks, and loaded the tenders of stationary engines.

The use of platforms at the height of the tender coping incorporated many different ways of delivering coal to the platform and transferring in from the platform to the locomotives. Coal delivered to the platform by wagon, by shoveling directly from cars, or from a raised trestle could be delivered to the tenders from the platform by direct shoveling, wheeled carts with chutes, tipping boxes with chutes, or with tipping or dump cars on trolleys. Many combinations of these methods were employed in a platform system; the choice of methods for a particular station was determined by the local resources and requirements (Berg 1893:133-135).

The system of using chutes was designed to dump sideways into tenders or from an overhead bridge. There were also different methods of getting the coal to the height of the chutes, including the use of an inclined approach, elevators, bucket belt elevator, or trough conveyor. The chute system could employ many variations of these methods, depending on the local needs and preferences.

The special patented devices for coaling stations included the use of locomotive hoists to deliver coal to the tender using the energy from the engine, a side car dump system whereby coal was loaded into the tender from a coal car that tipped sideways from a low trestle, and others (Berg 1893:135-141).

## THE RAILROAD SITES

The previous discussion of the components of the railroad system has provided a brief overview of the facilities and structures that are associated with terminal freight and engine maintenance stations. The following site descriptions will concern the railroad facilities in East St. Louis, most of which fit into the general scheme outlined above. However, in this site-specific documentation, the sites will be examined from



a developmental point of view, that is, the evolution of a particular facility over time, as well as documentation of the interrelationships between the railroad sites and those facilities of other railroads.

To facilitate this documentation of the railroad sites on Bloody Island, the terminal facilities of the railroads have been divided into parcels and given a number designation (Figure 3b). These parcels are oriented to property use and are drawn to delimit tracks, yards, and structures. They do not indicate total landholdings or other legal easements of land outside of that containing tangible structural remains. Thirteen parcel designations (1-13) delimit the facilities on the island and the near shoreline. The site-specific documentation begins with Parcel 1.

#### PARCEL 1

Parcel 1 is located at the north end of Bloody Island adjacent to the waterworks (Figure 3b). The area at the north end of the island was at the point where the high ground narrowed to a point with the old channel on the east side and the river on the other. In the late 19th century, this area was filled and used by the Chicago, Peoria, and St. Louis Railroad. This railroad, which was formed 1887, completed construction of trackage and waterfront facilities between East St. Louis and the Litchfield and Madison Junction in 1890. At this time, the C,P,& St.L Railroad had rail connections from Pekin, Illinois, through Edwardsville, Illinois (ICG 1950:1-2).

The C,P,& St.L Railroad was a shortline, intrastate railroad with only limited terminal facilities compared to the larger operations in East St. Louis. A 1919 Terminal Railroad Association valuation map depicts the engine maintenance and freight facilities on the island. The freight complex was perpendicular to Front Street with a two-story frame office, 40.5 by 84.5 feet in size, with a rear connected one-story frame freighthouse, 339 feet long and 40.5 feet wide. The freighthouse was the third one on this site since the original freighthouse was destroyed by fire in 1898. It was rebuilt and destroyed again by fire in 1914. The building rested on concrete piers, wood piles, and some brick.

The freighthouse consisted of open warehouse space with loading doors on each side. An open loading platform, 6 feet wide by 300 feet long, extended the entire length of the freighthouse on the south side. Adjacent to this platform were two railroad spurs that served the freighthouse. At the rear of the house was an additional open rear platform, 27 feet by 76 feet in dimension. A brick paved driveway for wagon or truck handling of freight was located on the north side of the freighthouse building (ICG 1950:1, 6).

At the rear of the freighthouse were the engine maintenance facilities, including a heat plant, water tank, sand house, cinder pit, engine pit, turntable, and engine house. The engine house was small, 20 feet wide by 70 feet long, and abutted the north side of the rear freight platform. It would appear that the turntable was designed mainly for reversing engines, allowing them to exit the facility without the use of a Y or loop track, since

the small engine house behind the freighthouse could have functioned as easily with a frog and switch track arrangement. Since the engine maintenance facilities had all been demolished prior to the Illinois Terminal Railroad appraisal in 1933, there is no information on the style of construction or material that was used in these structures.

The engine facilities were probably phased out in the 1920s, when the Chicago, Peoria, and St. Louis Railroad was sold under receivership to the Alton and Eastern Railroad. In 1930 the Alton and Eastern was leased by the Illinois Terminal Railroad Company, and in 1937 was consolidated under the Illinois Terminal. After 1937, it was leased to the Litchfield and Madison Railroad, which used the property until 1956. In 1957 the property was sold to the New York, Chicago, and St. Louis Railroad (ICG 1950:3-6). The NY,C,& St.L Railroad demolished all of the facilities on the old C,P,& St.L terminal freight station, and by 1964 aerial photos show a new freighthouse being built over the location of the former structure. The new freight facilities featured a large freighthouse with the western half devoted to truck handling, including truck docks on both sides of the building, and the eastern half of the freighthouse devoted to rail-borne freight, with track service spurs on both sides of this part of the building. This structure is still being used today by a truck leasing company.

## PARCEL 2

Parcel 2 is located at the north end of Bloody Island, just north of Spring Street (Figure 3b). This slot in the island's railroad facilities was filled by the Toledo, Cincinnati, and St. Louis Railroad in 1883. The T,C,& St.L Railroad was part of the Texas and St. Louis Railway, a proposed 1000-mile, narrow gauge (3 foot wide) railroad connecting the cotton districts of Arkansas and Texas to the Northeast. This narrow gauge railroad paralleled and competed against the 1500 mile-long Wabash-Iron Mountain-Texas, Pacific International, and Great Northern standard gauge combination operating between the same points.

The T,C,& St.L hoped to cut into the market held by the Wabash Railroad in the Gulf Southwest. Through merger, consolidation, and construction of new tracks, the T,C,& St.L was to link all the roads built on the narrow gauge system into one connecting chain called the Grand Narrow Gauge Trunk, or the Little Giant Line. Though the railroad offered fast movement of freight from the Gulf and express passenger service between Cincinnati and St. Louis, it could not compete with the better built and well established standard gauge Wabash Railroad. Late in the year of 1883, the T,C,& St.L, suffering financially and facing costly repairs of their hastily built road, of which only a third was ballasted, went into receivership (Rehor 1965:119-122, 134-144).

In 1885 the T,C,& St.L was reorganized in Ohio, Indiana, and Illinois as the Toledo, St. Louis, and Kansas City Railroad, also known as the Cloverleaf. The Cloverleaf, now converted to standard gauge, prospered in handling grain and cotton through the gateway and livestock and meat trains out of East St. Louis to the Northeast. However, the old debts of the railroad, the costs of conversion to standard gauge, and the financial crisis of 1893



forced the Cloverleaf to again go under despite a growing volume of business.

The Cloverleaf was operated in receivership until 1900 when it was sold and reorganized as the Toledo, St. Louis and Western Railroad. The new Cloverleaf continued its express passenger service, its stock and meat carrying, and moved into the coal-carrying business as well. However, more financial problems in 1914 forced another receivership for eight years (Rehor 1965:144-169). In 1922 the Cloverleaf was bought out by the New York, Chicago, and St. Louis Railroad, also called the Nickel Plate. The Nickel Plate operated the East St. Louis line until 1964, when it was merged with the Norfolk and Western Railway Company (Hanson 1975:524).

In the early years of the Toledo, Cincinnati, and St. Louis Railroad, and the Toledo, St. Louis, and Kansas City Railroad (Cloverleaf), there was no engine house terminal in East St. Louis; there was only a freight terminal facility. The freighthouse was located on Front Street (see Parcel 2, Figure 3b). In 1890, the Cloverleaf constructed a roundhouse at Madison, Illinois, near the Merchants Bridge approach (Rehor 1965:152). Unfortunately, there is no information on the design and construction of those early facilities.

A 1909 map of the area (Figure 7) shows what appears to be two long freight structures separated by tracks. Though it is impossible to discern any details of the buildings, it is probable that these structures represent inbound and outbound facilities. A 1919 Terminal Railroad Association valuation map shows a one-story wood frame freighthouse, 43 feet wide by 500 feet long, with a 7 foot-wide platform extending the length of the freight-house on the south side. This freighthouse, though sadly decayed, is still standing. Service tracks are located next to the platform, which extends along Front Street and the south side of the tracks, making a U-shaped contiguous platform around the tracks. A two-story brick freight office, 38 feet wide by 88 feet long with an additional 10 feet by 15 feet on the rear, is located on Front Street south of the freighthouse tracks. East of the freighthouse on the map was a spelterhouse (for handling and storing winter wheat), 185 feet long by 38 feet wide, with a platform 140 feet long and 38 feet wide on the rear.

By the mid-20th century, the railroad, now part of the Nickel Plate Road, had made some changes in the freight depot facilities. The frame freighthouse, platforms, and brick office remained the same, but an additional freighthouse, 50 feet wide by 100 feet long, was built east of the big freighthouse, and in place of the spelterhouse was built a long freighthouse, 410 feet long by 20 feet wide.

A 1922 photograph of the freighthouse, taken by Charles C. Holt, shows a modest, 1-story, frame structure with 12 bays (Plate 30b). Ten of the bays served as loading docks. The freighthouse has a low gabled roof, vertical board-and-batten siding, and a concrete foundation. In the photograph, the foundation was covered with wooden sheathing. In the background of the photograph can be observed a portion of the office roof and chimney. The freight-house shown in the photograph is now in an extremely advanced state of deterioration (Plate 32a).





PLATE 32. A. Nickel Plate Railroad Freighthouse, 1980. View is to the Northeast.



PLATE 32. B. Nickel Plate Railroad Freight Office, 1980. View is to the Northeast.



The brick office structure is also in a decayed state of repair (Plate 32b). It rests on a concrete foundation, and was heated by a furnace in the northeast corner of the structure. Behind the office is an open-sided concrete loading platform, covered by a tin roof (Plate 33a).

Because of its advanced state of disrepair, and the relatively complete historical and photographic documentation for the Nickel Plate Road freighthouse, no further work is recommended.

### PARCEL 3

This parcel is located between Spring and Winter Streets at the north end of Front Street (Figure 3b). It was the northernmost railroad terminal on the island until 1883, when the Toledo, Cincinnati, and St. Louis Railroad moved to the slot north of Spring Street.

The Toledo, Wabash, and Western Railroad reached East St. Louis in 1870 with completion of the Decatur and East St. Louis line (Cole 1922:43, 360). The T,W,& W, or the Wabash as it was called, was a conglomeration of many such small railroads strung together to form a route stretching from the St. Louis gateway to the Northeast. In addition to the Decatur and East St. Louis Railroad, the Toledo, Wabash, and Western was a consolidation of the Great Western Railway Company, the Quincy and Toledo Railway Company, and the Illinois and Southern Iowa Railroad (Reavis 1876:86). Forged by the infamous entrepreneur, Jayson Gould, the Wabash system by 1880 embraced 15,000 miles of railroads, or 15% of the total U.S. rail mileage, and stretched from the Gulf-Southwest through St. Louis to the Northeast (Rehor 1965:13-15).

However, in the first few years of its existence, the Wabash terminated at East St. Louis and had both its terminal freight and terminal engine facilities on the island. This complex appears on the 1874 (Figure 13) and 1881 (Figure 9) maps of the area. The roundhouse shown on these maps was the second one built as the original structure was damaged by a train accident. An account of the accident reported in the St. Louis Dispatch is drawn from the report of Smith and Lange 1980:

This morning about 10:00 the T, W, and W roundhouse at the head of the island was seriously damaged by a singular oversight on the part of the switchmen: a train was backing into the yard and by misplacement of a switch the cars were backed into and through the roundhouse, knocking down the south wall in the center. This caused the support of the slate roof to give way, and the entire roof came down on the cars, crushing them (St. Louis Dispatch, 4 March 1873:3, cited in Smith and Lange 1980:75).

The terminal facilities of the Toledo, Wabash, and Western Railroad in 1874 consisted of a roundhouse and turntable, and three freight handling buildings. The two largest buildings were 40 to 50 feet wide and 350 feet and 270 feet long. The structure nearest the roundhouse was about 350 feet long and less than 40 feet wide (Figure 13). The 1881 Army Corps of Engineers



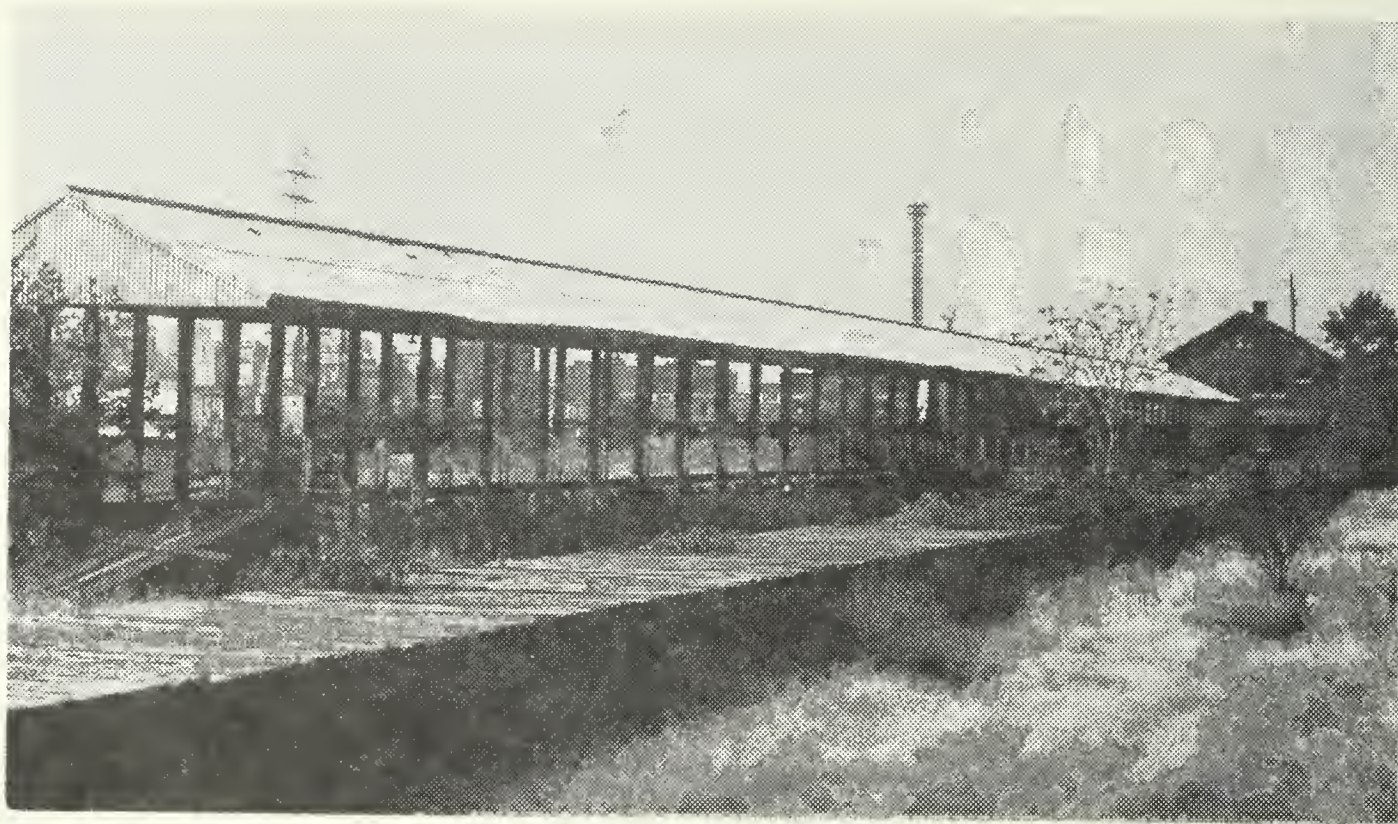


PLATE 33. A. Nickel Plate Railroad Freight Platform, 1980. View is to the Southwest.

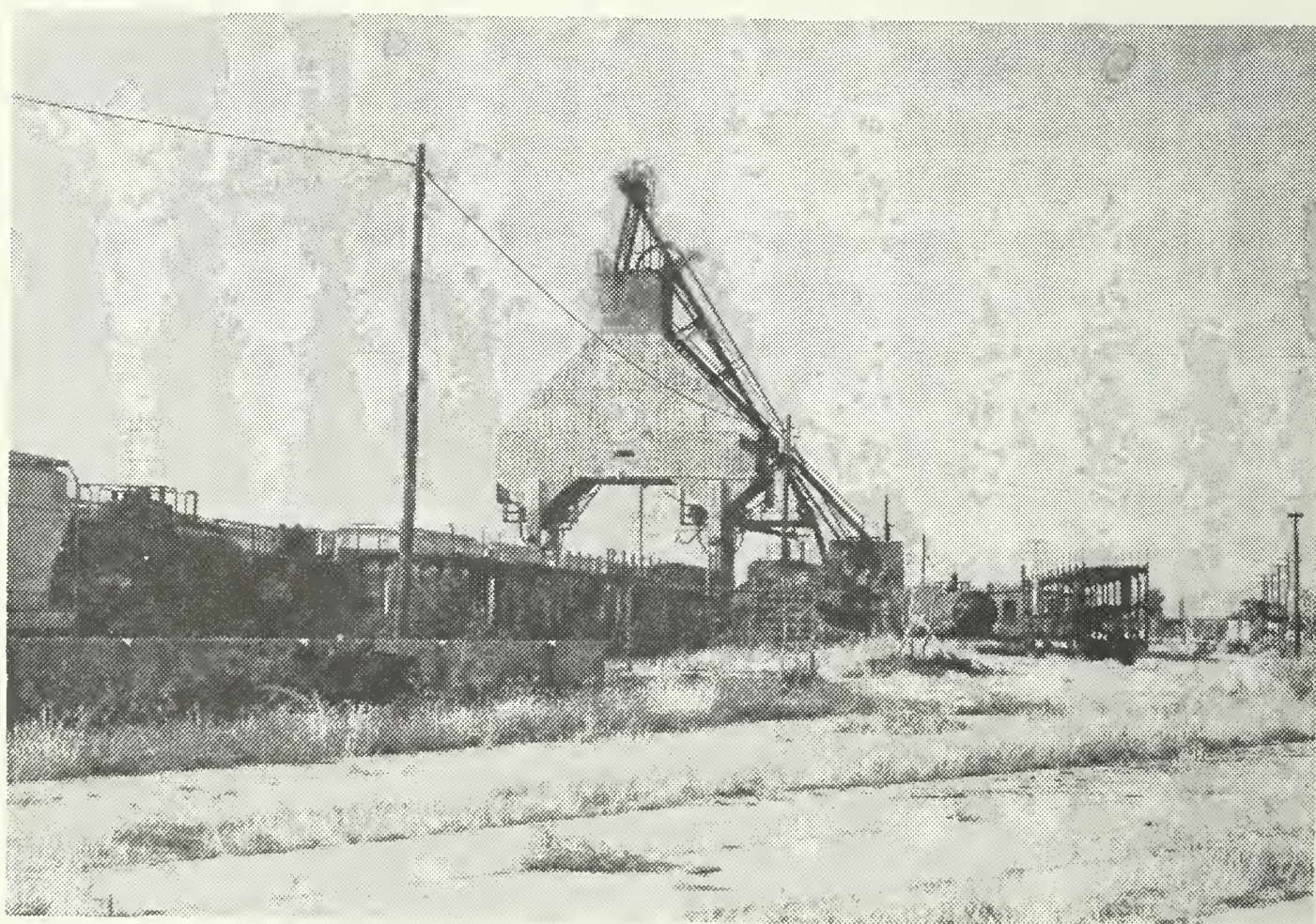


PLATE 33. B. Wabash Roundhouse Coal Tipple in 1980, Looking North.



map (Figure 9) does not show freight buildings for the T,W,& W, though undoubtedly they were there, but the roundhouse is shown unchanged in the same position.

Beginning in the 1880s, Gould's Wabash Railroad held tenaciously to its holdings against many competitors. An early bid in 1880 by the Nickel Plate to construct a line parallel with the Wabash to St. Louis was forestalled by a Nickel Plate-Wabash alliance. Another short-lived threat was posed by the narrow gauge Toledo, Cincinnati, and St. Louis Railroad with connections from the Gulf-Southwest to the Northeast paralleling the Wabash. However, the narrow gauge could not compete and went under two years later. The reorganized road, the Cloverleaf (Toledo, St. Louis, and Kansas City), did well against the Wabash, especially in passenger and meat express service. By far the leading protagonist in the railroad battle with Gould was William H. Vanderbilt, who in 1883 bought the Nickel Plate, thus robbing the Wabash of a valuable ally and instituting a rate war along many stretches of the Wabash line that were paralleled by a Nickel Plate or other Vanderbilt railroad line (Rehor 1965:13-22, 33-41, 134-141).

Stiff competition and the financial panic of 1907 resulted in a collapse of the Wabash Railroad under the direction of George Gould, scion of the infamous Jayson, who died in 1892. In 1908 the railroad went into receivership (Rehor 1965:333-335). In 1915 a new Wabash Railroad Company was reorganized from the foreclosure sale of the Gould roads (Hanson 1975:550).

Under the reorganization, the company operated jointly with the Missouri, Kansas, and Texas Railroad, which steered business from west of the Mississippi River clear of the congested St. Louis terminals. As a result, the Wabash terminal complex underwent some modification. The roundhouse and freight complex, probably destroyed by the 1896 tornado, are not shown on the 1909 map (Figure 7), so possibly these functions were being carried on elsewhere along the route of the reorganized railroad. Even so, the Wabash still had connections with the National Stockyards, and the transport of meat and livestock as well as passengers, to the Northeast could have constituted a substantial share of business during that period.

By 1911 the Wabash again had freight and engine maintenance facilities in East St. Louis. Two freight buildings, approximately 80 feet wide by 550 and 650 feet long, were built in about the exact locations as the ca. 1875 to 1881 buildings. A roundhouse also was constructed between the National City/Brooklyn City limits near St. Clair Avenue (Figure 3b). The new roundhouse was a 140-degree engine house equipped with an 85-foot diameter turntable.

The Wabash Railroad continued through the years to carry meat and livestock out of East St. Louis, and, though the passenger service declined, the Wabash, like many of the railroads, expanded in the mid-1950s to include piggyback service. The piggyback or trailer on flatcar (TOFC) service succeeded and became dominant for many reasons. Industry was becoming more and more decentralized and mobile, requiring quick transport service for industries not located directly on a railroad. By carrying trailers on flatcars, railroads could cut their own freight switching costs (a major

source of overhead), and reach customers directly via the highway with a trucking service at the terminal depot (Rehor 1965:374).

Despite the optimism of the new trucking expansion, the economic recession that began around 1957 had a disastrous effect on the entire railroad industry. The Wabash Railroad soon passed into the hands of the Pennsylvania Railroad. In 1964 the Norfolk and Western Railroad merged with the Nickel Plate (New York, Chicago, and St. Louis Railroad) and the Wabash Railroad, which was divested from the Pennsylvania Railroad, to form a strong 7500-mile system (Rehor 1965:384, 385; Hanson 1975:184, 524-526, 550-552).

With the fluctuations in the fortunes of the Wabash Railroad, the changes in the local East St. Louis terminal facilities can be seen to indicate an adaptation to the trucking aspects of freight handling, along with a lessening of importance of the old roundhouse in routine engine maintenance duties. By 1928 the old 140-degree roundhouse on St. Clair Avenue had been modified with the addition of a 40-degree segment on the north side and the demolition of 40 degrees of old roundhouse to the south of the new addition. At some point between 1964 and 1974, the remainder of the original pre-1928 roundhouse was demolished, leaving only the 40-degree addition (Plate 34), which is all that remains at the present.

The roundhouse is constructed of brick and sits on a foundation and floor of concrete. The roundhouse has pilasters between the bay walls that support the fire walls and roof. The turntable, which is still operative and complete with original control booth, is on a four foot-deep, concrete-faced pit (Plate 35).

To the north of the turntable is the coal tipple (Plate 33b). This structure was used to fill the coal cars and the sand reservoirs of the engines. It is built of concrete and steel, and was capable of servicing four engines simultaneously through the use of two hoppers. The flow from the hoppers was activated by the use of caged counterweights and chutes. Two of the counterweights are still present, although the chutes are missing. The sand pipes (sand was used to provide traction on icy tracks) are located on the north side of the tipple. The coal was loaded into the hoppers from storage piles by a rotating set of buckets, called a skip. When one bucket of coal was going up, the other, having dumped its contents into the hoppers, was coming down. To the east of the coal tipple are two structures of concrete and steel. The small building apparently held lubricating oil supplies, while the larger building was used for sand storage and drying (the sand had to be thoroughly dried, using heat, prior to its use by the engines). The small heater for the dryer was probably located on the lower floor of the structure.

The Wabash Roundhouse complex is significant in that it possesses the only remaining coal tipple in the metro-East area. Because an awareness of the use and appearance of coal tipple is mandatory to the understanding of the workings of a roundhouse complex, and because this is the only remaining coal tipple in the project area, this site should be considered for inclusion in the National Register of Historic Places. It is recommended that data recovery techniques be centered on the measured drawing of the tipple and its associated structures by NAER.



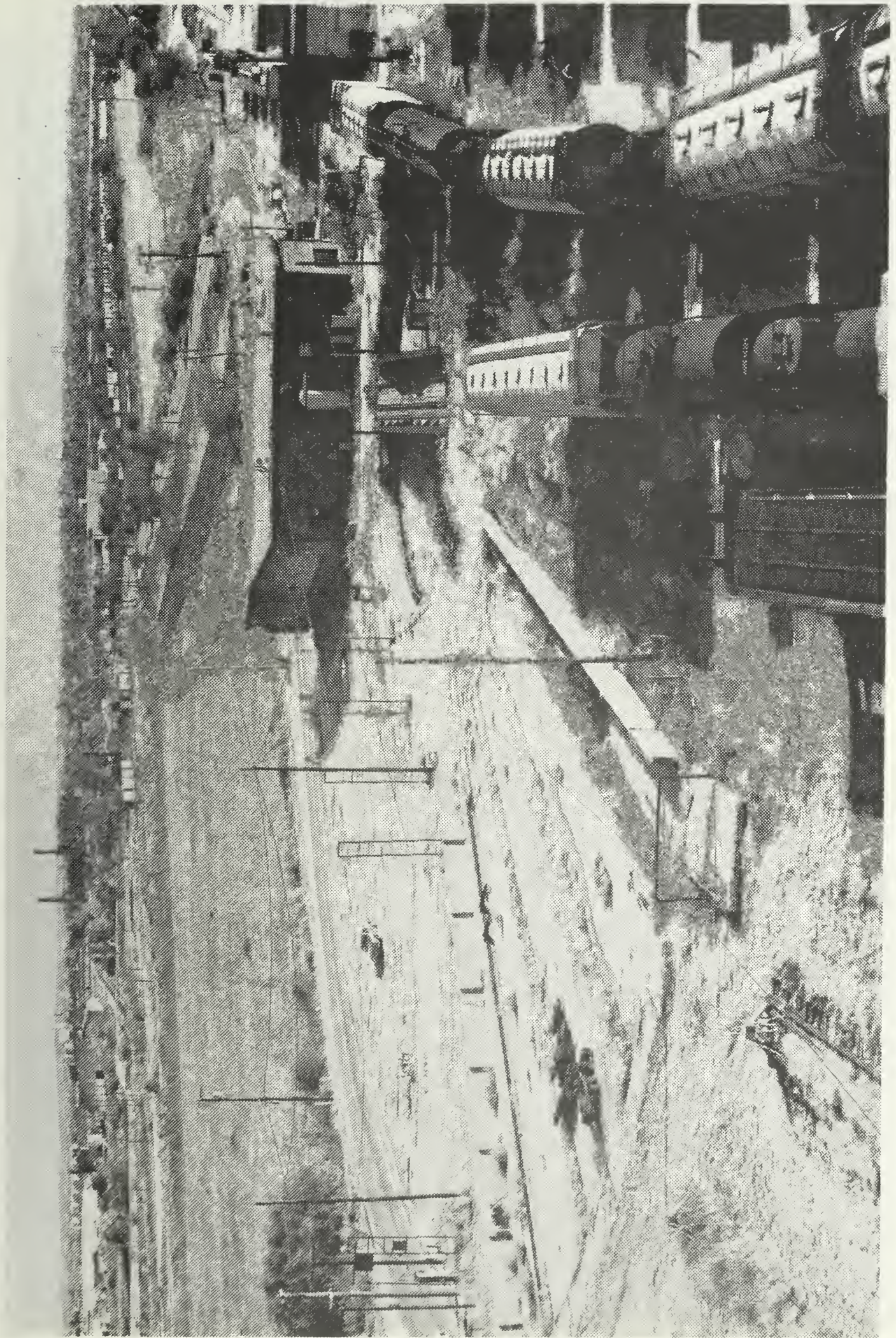


PLATE 34. Wabash Roundhouse Remains as Seen from the Coal Tipple, 1980. View is to the South.



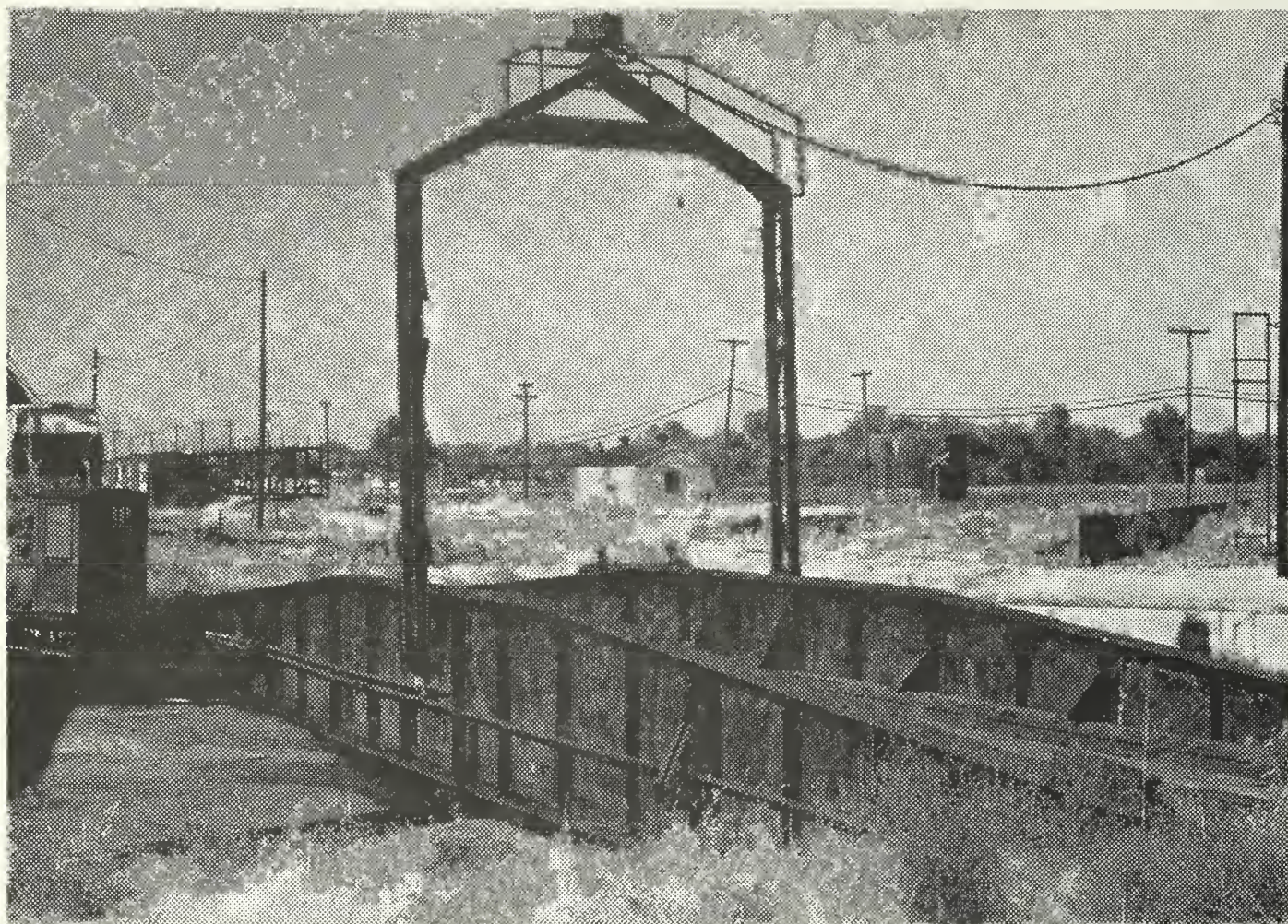


PLATE 35. A. Wabash Roundhouse Turntable in 1980. View is to the Northeast.

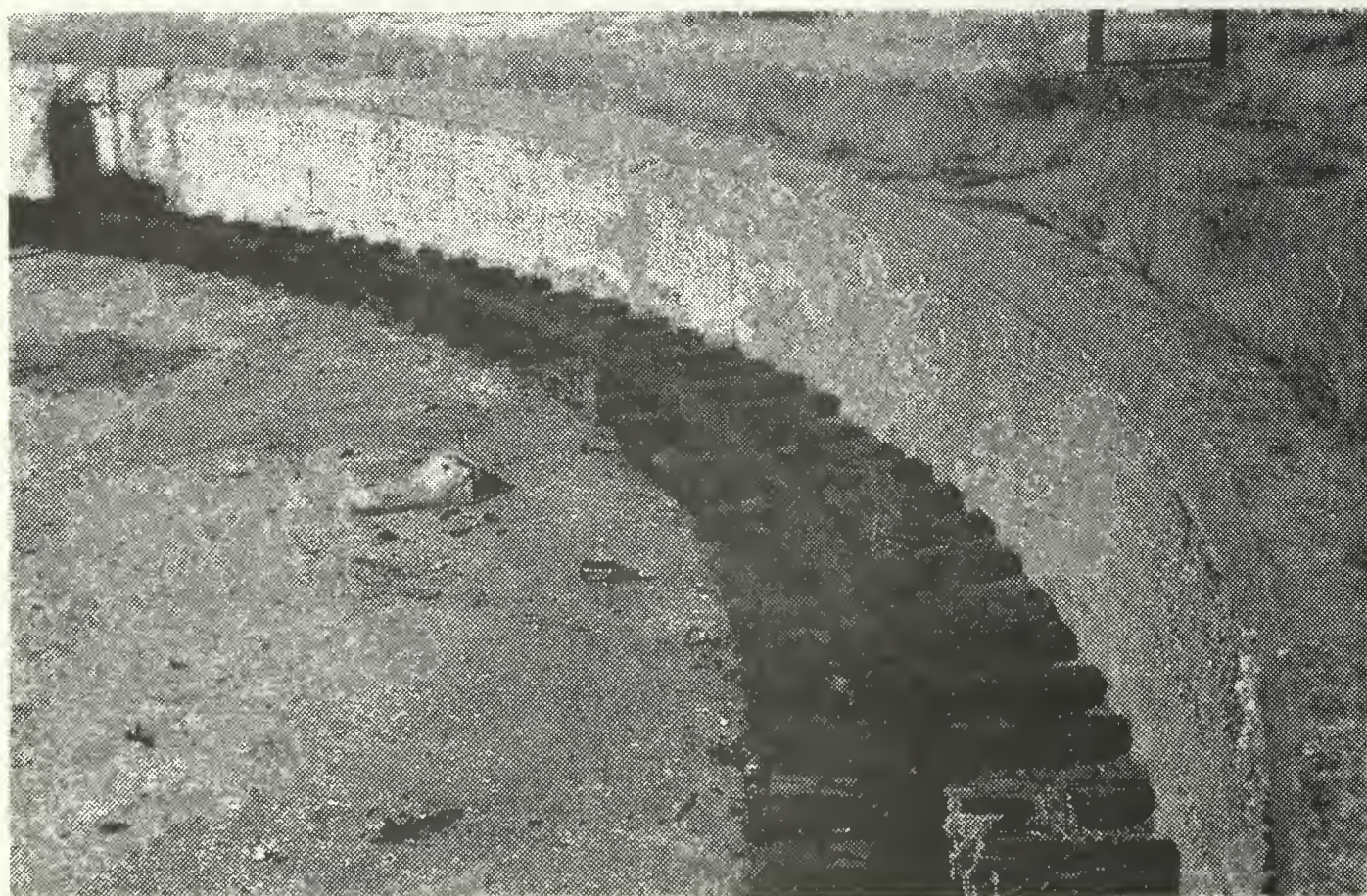


PLATE 35. B. Wabash Roundhouse Turntable Pit and Track, 1980.



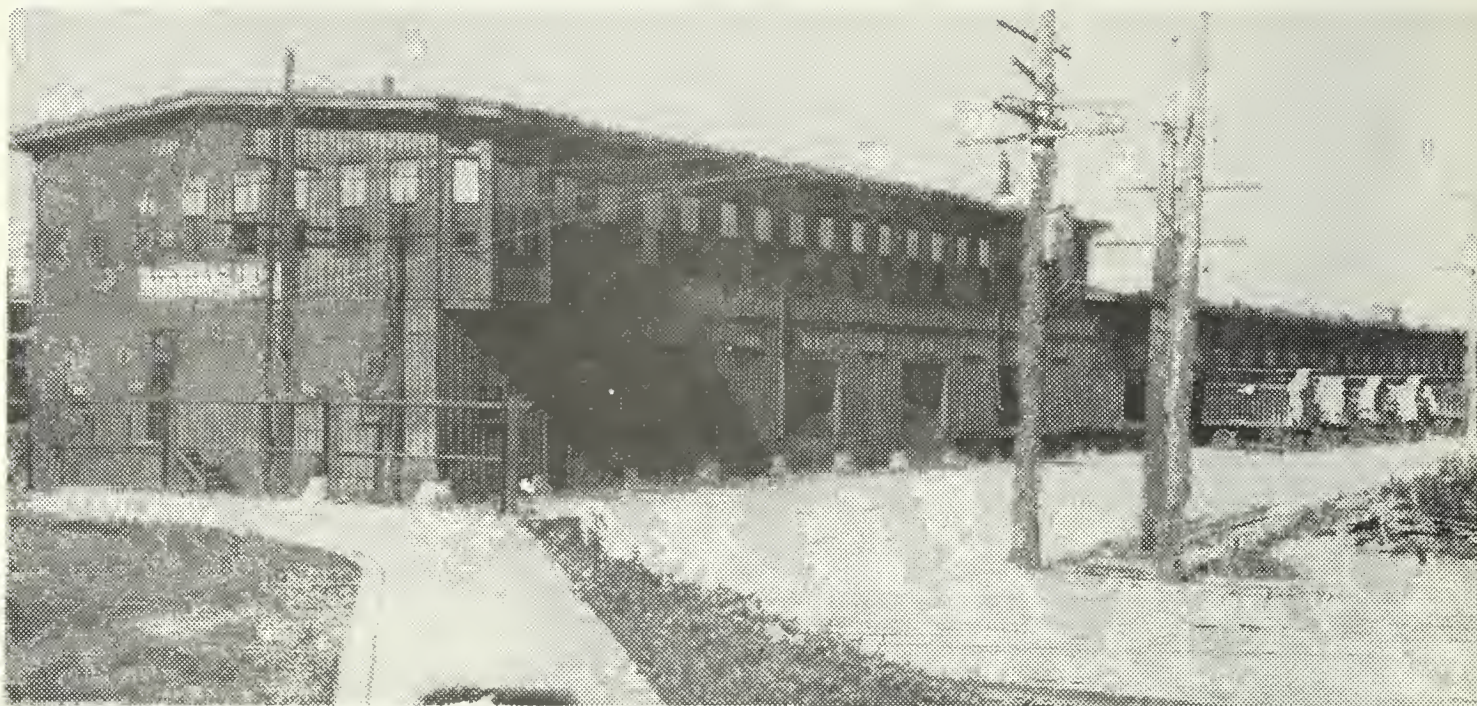
The Wabash Freighthouse, on Front Street, also experienced changes between 1911 and the late 1970s when it was demolished. The 1911 configuration consisted of two freighthouses, 50 feet wide and 250 and 300 feet long, located 75 feet north of Winter Street. However, by 1922 an entirely different freight complex configuration is shown on the maps. A large freighthouse, 650 feet long and about 50 feet wide, was built adjacent to and north of Winter Street. A 200 foot-long freighthouse with a loading platform was located at the north end of the complex. A 1922 photograph of the southernmost freighthouse (the inbound house) shows a 2-story frame office building from which extended a 1-story frame freight-house (Plate 36a). The foundations of both structures, as well as the outbound freighthouse, which is not visible in the photograph, are concrete. Both the office and the freighthouse were covered with vertical board-and-batten siding. The office had a very low gable roof, while the freight-house roof appears to have been flat, with overhanging eaves protecting the loading docks. An oriel in the southwest corner of the office building allowed observation of the docks. The office had four loading docks on its first floor, but it is impossible to determine the number of bays in the freighthouse from the photograph.

The 1928 and 1932 aerial photographs of East St. Louis show that this freighthouse configuration remained in use for several years. However, a 1955 Sanborn Insurance map shows a much different freighthouse office layout. Instead of the long rectangular office with the long axis oriented east to west (Plate 36a), this office is short and rectangular, with the long axis oriented north to south (Figure 32). Whether this change extended to the entire facility could not be determined through analysis of maps and aerial photographs.

Further examination of the 1955 Sanborn Insurance map and aerial photos reveals more about the layout of the Wabash freight handling facilities. The two-story building was located at the corner of Front and Winter Streets. Locker rooms were located on the first floor and the freight office was on the second floor (Figure 32). The rest of the complex was for freight handling and storage, including the various loading docks along Front Street and extending along the tracks perpendicular to Front Street. Though much of the freighthouse was wood frame, the portion connected to the office along Front Street and parts of the freighthouse at the east end of the facility were constructed of steel frame with metal decks. This might indicate that the changes in the office complex between 1932 and 1955, and the introduction of metal frame buildings with metal decks, occurred at the same time, with the wood frame portions of the facility being holdovers from the ca. 1922 freighthouse.

The Wabash freight facilities in East St. Louis apparently did not fit into the plans of the Norfolk and Western Railroad, because by 1975, much of the freighthouse had been demolished and used for parking empty truck trailers. All that remained in 1974 was the office, and one of the four freight handling building appendages that stretched between the tracks. Six years later, at the time of the field survey, there were no structural remains other than some foundations that are located on Figure 32.





- PLATE 36    A   Wabash Railway Inbound Freighthouse, 1922



- PLATE 36    B   Wabash Freighthouse Site, Tie Stains, 1980



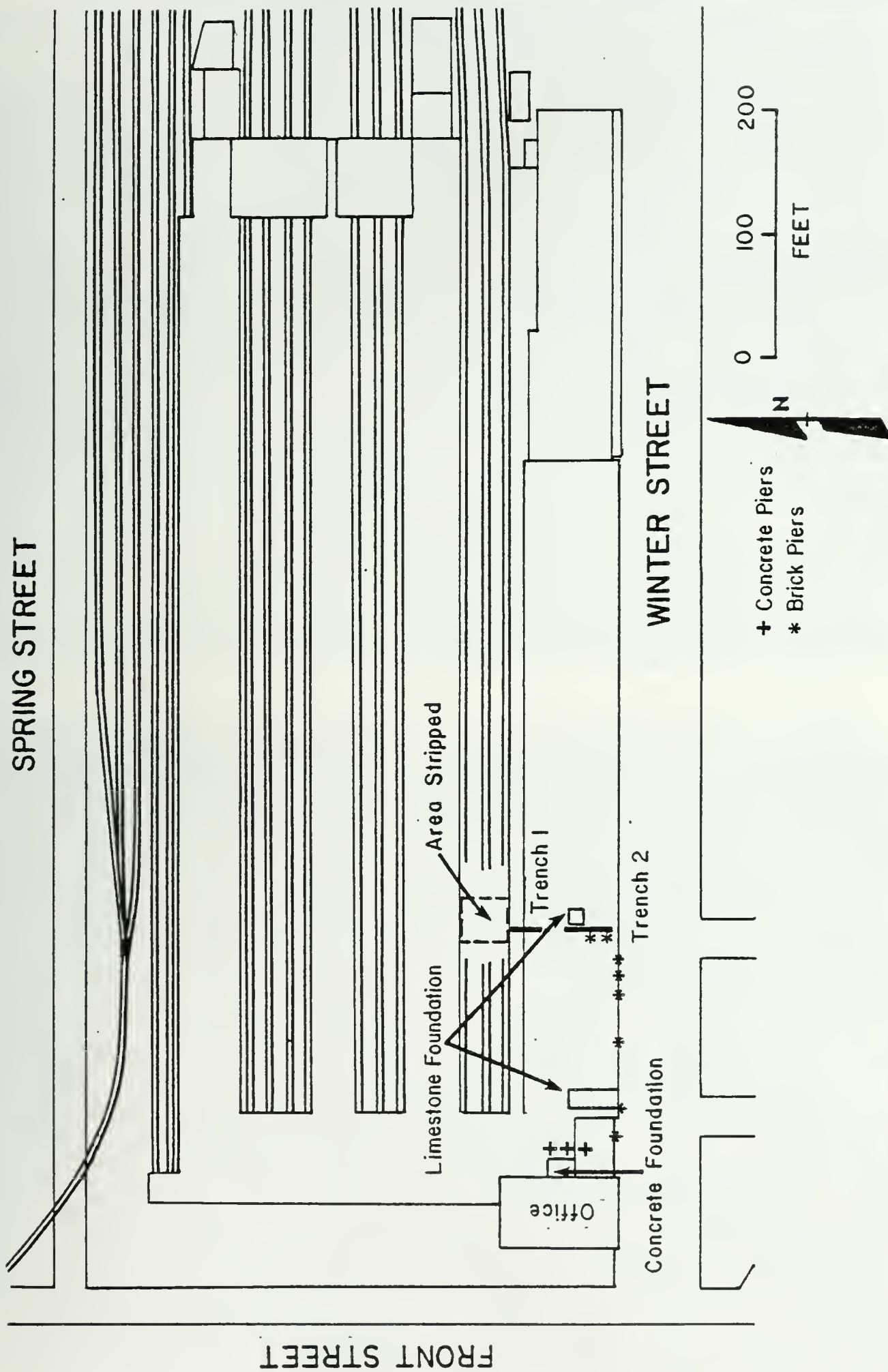


FIGURE 32. Wabash Freighthouse and Plan of Archaeological Investigations,  
Based on the 1955 Sanborn Insurance Map.

## Archaeological Testing at the Wabash Freighthouse

Archaeological testing investigations were conducted at the Wabash facility initially to explore the ca. 1874 Toledo, Wabash, and Western Railroad freighthouse and roundhouse remains that pre-date the present facilities (Figure 13). However, close examination of available maps and aerial photos of the area, as well as field inspection of the site, revealed that the roundhouse, located on and south of Winter Street, had been previously impacted by construction of the East Side Levee and Sanitary District pumping station and slough, and maintenance of Winter Street for truck access (Figure 32). For that reason, emphasis was shifted to the freighthouse complex north of Winter Street, where investigations provided information on the ca. 1874 freighthouse facilities and later 20th-century modifications and additions to the facility.

Though the last Wabash freighthouse facilities were present less than six years prior to the survey, there is very little remaining to indicate the enormity of the complex as it once existed, other than sparse and scattered foundation remains. The above ground structural foundation remains can be grouped under three typological categories: cut limestone, red brick, and concrete. The distribution of these foundation remains is shown in Figure 32.

In addition to mapping the foundation remains, a large area was cleared with a front end loader (Figure 32). A foot of loose soil and vegetation was removed to reveal a pad of compacted loam and cinders over crushed limestone and gravel (Plate 37a shows a profile of the platform). The platform is 25 feet wide north to south and, judging by the vegetation pattern, which is stunted over the platform, it extends east and west perpendicular to Front Street. When this data is combined with the archival information from the 1955 Sanborn map, it can be seen that this pad is the base for a freighthouse building (Figure 32).

An 18 foot-long backhoe trench was excavated perpendicular to the building pad through the ca. 1955 freighthouse track spurs. The trench provided a good view of the preparation of the track pad and the filling over the original sandy ground surface in preparation for the tracks (Plate 37b). At the south end of this backhoe trench, machine stripping revealed railroad tie stains (Plate 36b), which verify the location of the freighthouse track spur.

A second backhoe trench, 42 feet long, was excavated through the area of the last freighthouse adjacent to Winter Street (Figure 32). The soil deposits in this trench were generally indicative of filling to 2.5 feet above the original clean, sandy ground surface. One freighthouse pier located in the wall of the trench consisted of cut limestone laid at the original sandy ground surface, topped by a red brick pier that raised the footing to the present ground surface (Plate 38a). Footings for the freighthouse, both limestone and brick, are located in this area of the last freighthouse. Artifacts recovered in the trenching all dated to the late 19th/early 20th centuries (Appendix A).

Analysis of the archaeologically derived data with the documentary information on building episodes presents an explanation for the three building





PLATE 37. A. Wabash Freighthouse Excavations,  
Closeup of Trench Profile, 1980.

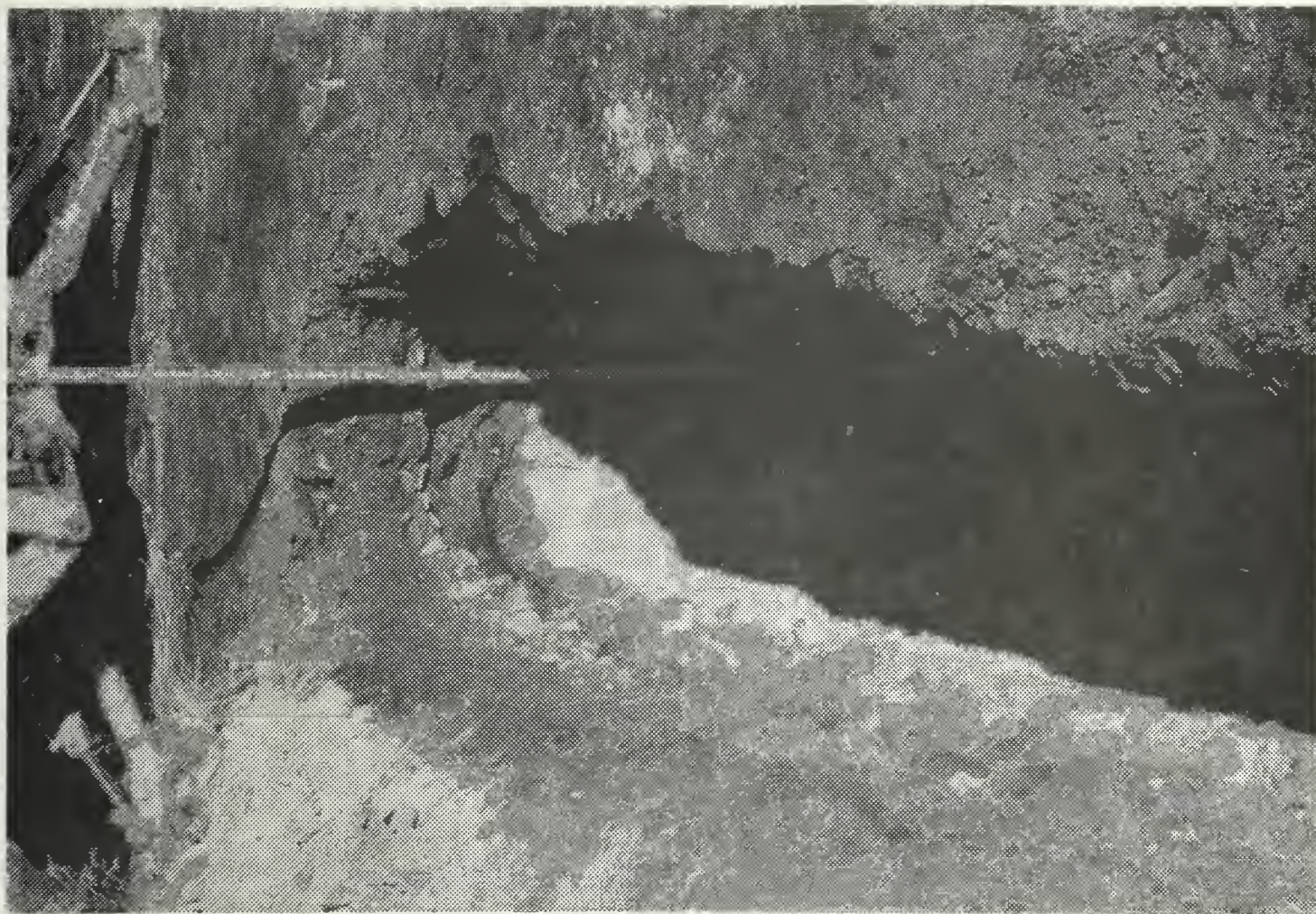


PLATE 37. B. Wabash Freighthouse Excavations,  
Backhoe Trench, 1980.





PLATE 38. A. Wabash Freighthouse Excavations, Limestone and Brick Pier, 1980.

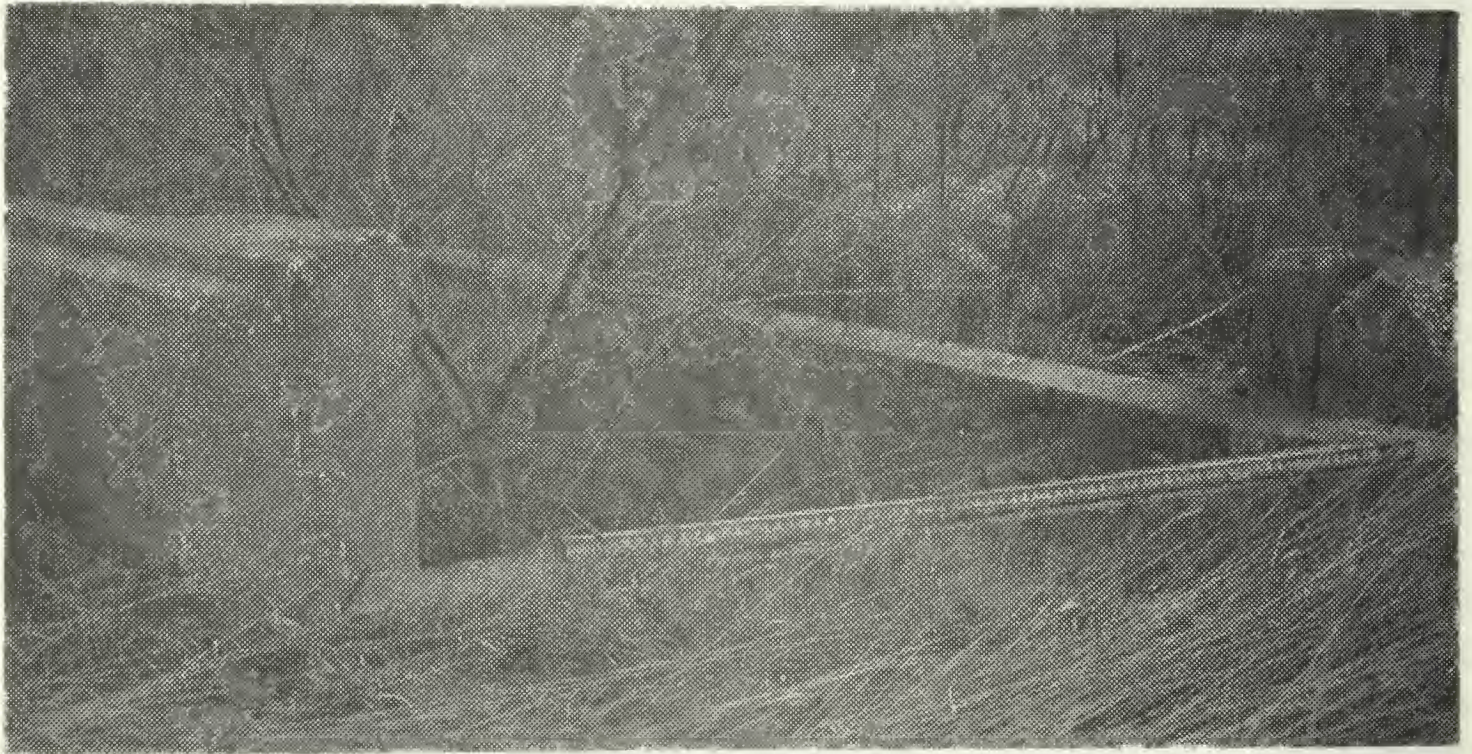


PLATE 38. B. Wabash Freighthouse Complex, Concrete Foundation, 1980.



material types (limestone, brick, concrete) and the three foundation configurations. The documentary data indicates four building episodes at the Wabash terminal: 1873, 1910, pre-1922, and pre-1955. Each building material type corresponds to a building episode. First, the limestone used in the construction of the two foundation remains (Figure 32) would suggest a pre-1900 date of construction, as brick and concrete became popular in construction as substitutes for limestone after 1900. The configuration of the limestone foundation conforms to the ca. 1874 location of a freighthouse next to Winter Avenue (Figure 13). There are two limestone foundation remains mapped in the field: the westernmost limestone foundation is 40 feet wide and the easternmost one is 12 feet wide (Figure 32). It is not inconceivable that the 1874 freighthouse was 40 feet wide near Front Street and narrowed to 12 feet wide away from the street, since the two ends of the building could have performed different functions. For instance, offices and storage space could have been located in the front and freight handling in the rear, or inbound freight (requiring a lot of storage space) in the front and outbound freight (requiring very little or no storage time and space) in the rear.

When the first freighthouse complex was demolished at the turn of the century, the area adjacent to Winter Street was not utilized as a building site for the new 1910 facility. However, by 1922 this location contained the inbound freight facilities and office (Plate 36a). The preformed concrete footings and the concrete foundation for the 40 foot-wide house shown in this photograph were augmented by refurbishing remnants of the limestone foundation with brick piers, as is illustrated in Plate 38a. The last freighthouse on the site of the Wabash terminal was a large, 80 foot-wide freighthouse that apparently utilized all of the previous freighthouse foundations and piers in its construction. In addition, the widening of the freighthouse to 80 feet eclipsed the old freighthouse track spur (Plate 36b) and necessitated preparation of a new railroad bed (the 25 foot-wide pad in Plate 37b). Other remains of the last Wabash freighthouse include a concrete foundation and oil cradle (Plates 38b and 39a).

The Wabash Railroad historical documents research and archaeological investigations provide a view of freighthouse construction and modification between 1873 and 1975. Though further archival research could contribute more to an understanding of construction and design changes in this facility, it is doubtful that any additional archaeological work at the site could contribute to the further understanding of the site beyond the level accomplished in this testing investigation, and so no further archaeological work is recommended. Final recommendations for the Wabash site will be included in the final chapter.

#### PARCELS 4 AND 6

These sections of the island are located between Missouri Avenue and Winter Street (Figure 3b). The Ohio and Mississippi Railroad entered near the midpoint of the island and curved northward in the approach to Parcel 4. Because of this diagonal approach, both the Ohio and Mississippi, and the Chicago and Alton (Parcel 5), have yards at an acute angle to the other terminal yards and Front Street (Figures 7, 8, 9).



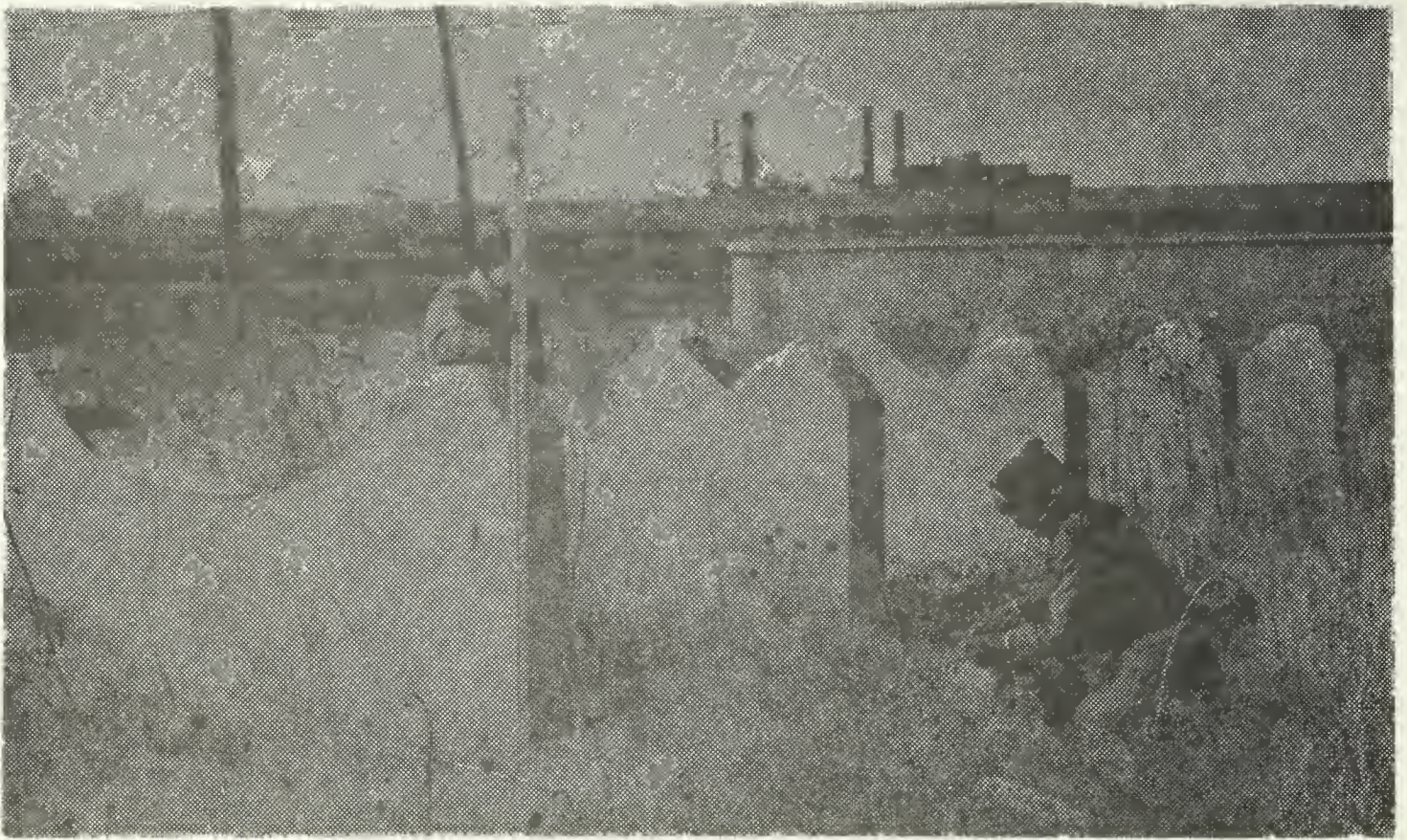


PLATE 39. A. Wabash Freighthouse Complex, Oil Tank Cradle, 1980.

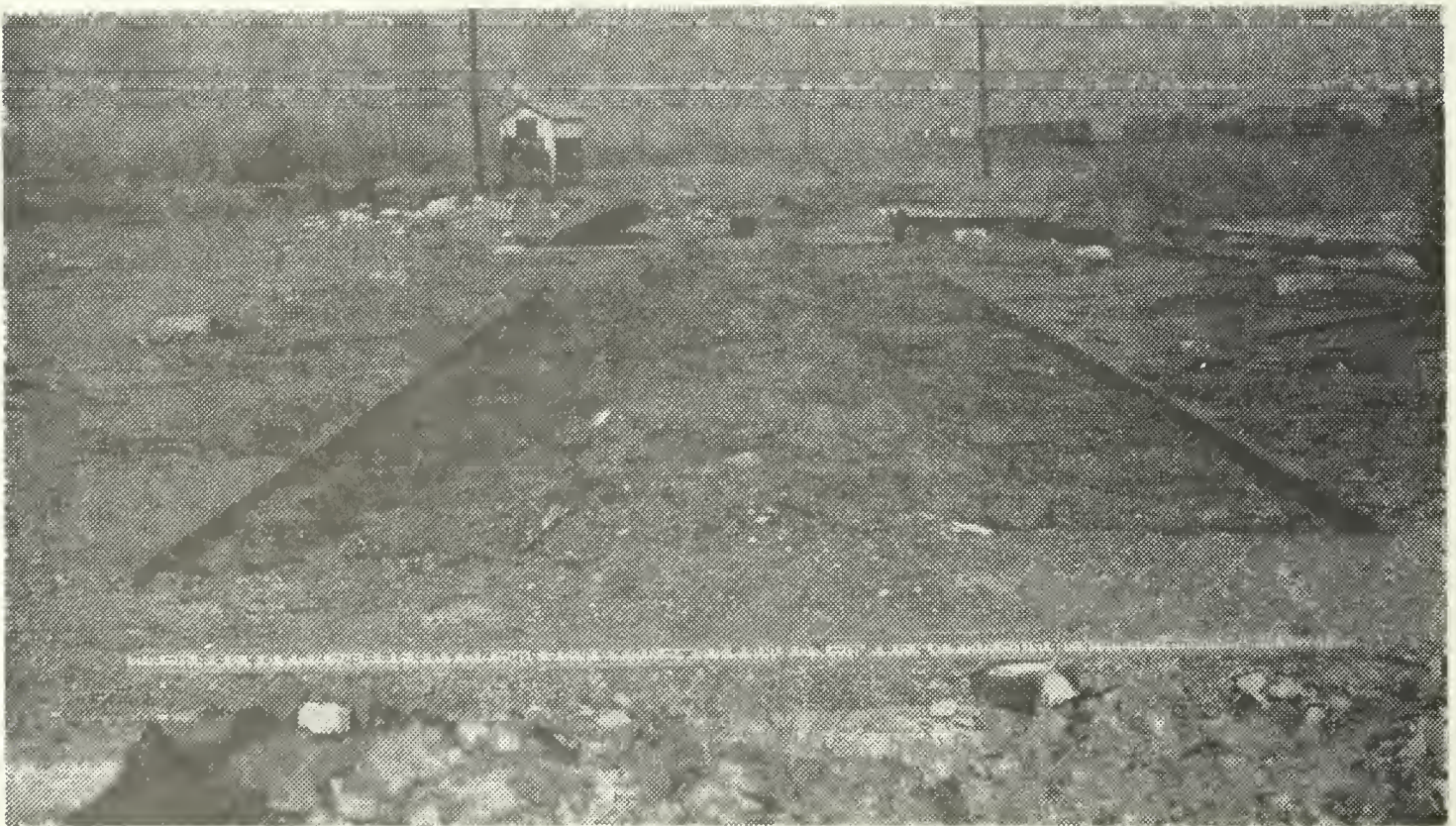


PLATE 39. B. Chicago, Burlington, and Quincy Roundhouse Remains, 1980.  
View is to the North.



The Ohio and Mississippi Railroad, one of the early railroad ventures to be conceived as a long, interstate route linking together the established river towns of St. Louis and Cincinnati, was granted a charter in 1851 amidst much opposition from special interest groups who desired to build up Illinois cities (Cole 1922:32-44). The Ohio and Mississippi Railroad, which was opened from Illinoistown to Vincennes in 1855, had its first terminus at the Wiggins ferry landing south of Illinoistown. After 1857, the O&M Railroad moved its terminal to Bloody Island following completion of the St. Louis harbor improvements (Reavis 1876:60-63).

By 1874 the Ohio and Mississippi Railroad was established with two railyard terminals on the island (Figure 13), and a large engine house complex east of the island. At the northern terminal (Parcel 4), the O&M had a large complex of railyards; three freighthouses, about 40 feet wide and 500, 450, and 200 feet long; and, to the north, a rectangular 40 by 80 foot building with a railroad track entering from the east end. This may have been associated with engine maintenance. At the southern terminal (Parcel 6), the O&M had a second freighthouse complex, including a 40 by 400 foot freighthouse, a building 40 by 80 feet, and another approximately 40 by 150 feet long.

Six years later, there had been some changes in the layout of the two Ohio and Mississippi Railroad parcels (Figure 9). At the northern landholding, the railyard and freighthouse complex had been transferred to the Chicago, Burlington, and Quincy Railroad, and had been redesigned to function as both freight depot and loop turnaround yard. Parcel 6 had been changed as well. In place of the three buildings on the 1874 map, there were now two large freighthouses, each about 600 feet long and about 100 feet wide, if the 1881 Army Corps of Engineers map is accurate (Figure 9). In addition, the O&M had constructed a 110-degree roundhouse just west of Cahokia Creek to replace the large facilities that were phased out in the 1870s.

The Ohio and Mississippi Railroad began to experience financial difficulties in the last quarter of the 19th century. Designed and built in the early period of railroad expansion when river traffic was still considered an influence in the future course of trade and commerce, the O&M Railroad linked two bustling river towns, St. Louis and Cincinnati, in a direct connection to the Northeast. With massive rail construction built as broad gauge (6 feet wide), the two terminal freight yards on Bloody Island and a large machine shop tract (Figure 13) are mute testimony to the ambitions of the founders of the Ohio and Mississippi Railroad. However, the O&M failed to draw from Chicago the trade that flowed up the Mississippi River to be shipped east by the lake or rail route (Cole 1922:46). As a result of the rather lukewarm business, the O&M began to unload some of its property starting with the machine shop tract in 1875 (Reavis 1876:84).

By 1881 the upper parcel (Parcel 4) had been completely transferred to the Chicago, Burlington, and Quincy Railroad. The Ohio and Mississippi Railroad still was unable to survive, and in 1893 the company was taken over by the Baltimore and Ohio Railroad, which established a freight terminal in Parcel 6.

#### PARCEL 4

The Chicago, Burlington, and Quincy Railroad became a large railroad by consolidating small railroad companies in western Illinois. Chartered in the mid-19th century, the C,B,& Q absorbed the Central Military Tract and part of the old Northern Cross Railroad in the mid-1850s, and the Rockford, Rock Island, and St. Louis Railroad in 1869 (Cole 1922:43, 360). By 1870 the C,B,& Q had 460 miles of railroad track in Illinois, second only to the Illinois Central Railroad, and by 1880 it held 2800 miles in Illinois (Bogart and Thompson 1922:294, 317).

In East St. Louis, the Chicago, Burlington, and Quincy Railroad took over the north terminal station previously owned by the Ohio and Mississippi Railroad. The C,B,& Q, however, did not take any O&M mainline track. That property went to the Baltimore and Ohio Railroad in 1893. The C,B,& Q Railroad already had connections to East St. Louis through absorption of the Rockford, Rock Island, and St. Louis Railroad in 1869.

The East St. Louis terminal station for the C,B,& Q Railroad by 1881 included freight handling facilities and an engine house. The freight facility included two buildings: a freight house, 80 by 100 feet, and another building, 120 feet square, that may have been a warehouse. In addition, the C,B,& Q had a loop turnaround track, presumably for reversing trains. The roundhouse, located north of the Cahokia Creek bend, was a 100-degree house with a turntable (Figure 9).

Since the devastation of the East St. Louis gas works, located 100 feet south of the roundhouse, was so extensive (Plate 26a), it seems safe to assume that the original C,B,& Q Roundhouse had also been destroyed. The roundhouse was rebuilt at the same location by 1905 (Figure 7). The second roundhouse was a north-facing, 110-degree house with a 64-foot diameter turntable. The roundhouse was divided into eight stalls, each 64 feet long. A small rectangular building, 25 by 12 feet and located along the turntable track, was a sandhouse.

The roundhouse was removed sometime before 1929, and another roundhouse was constructed at this location between 1936 and 1955 (Figure 27). The roundhouse was apparently constructed on the foundations of the previous two structures, as the turntable and house tracks appear to have been in the same locations. The roundhouse was 110-degrees, like its predecessor, though it was much larger and divided into two sections. The northern section was 64 feet long, like the original, except for the westernmost stall, an addition to the original eight-stall plan, which was only 50 feet long and had a track connecting the turntable with the yard track (Figure 27). This was possibly an express stall for routine maintenance and quick release of engines.

The southern portion of the roundhouse consisted of an overlapping section that made the total length of the roundhouse about 120 feet long. The addition to the original plan afforded roughly twice as much room in each engine stall as the earlier plan, and probably served to accommodate two engines at once in each stall. This is perhaps a sign of the expansion of the C,B,& Q Railroad in East St. Louis during that period, or an indication that the East St. Louis facility had more responsibility in engine maintenance than it had previously.



The Chicago, Burlington, and Quincy Roundhouse was demolished in 1979. Before that, researchers from the Illinois State University visited the site during the initial East St. Louis MARGE reconnaissance study. They reported that in early 1979 the roundhouse was still intact, though it was no longer being used to service engines. The roundhouse was constructed of modern center-hole brick (Smith and Lange 1980:68). A later visit by WAPORA personnel provided a view of the foundation remains, which were concrete, and the turntable pit, which was also concrete. In addition, large wood timbers found at the site indicate that the building was framed in wood (Plate 39b). Inspection of the site also indicated that there was an engine washing facility on the tracks just northwest of the turntable (Field Curry, personal communication 1980). The turntable pivot is still intact (Plate 40a).

No further work is necessary at the Chicago, Burlington, and Quincy Roundhouse. All that remains of the site are the roundhouse and turntable pit foundations. These are well documented photographically, both on the ground and from aerial photos. In addition, more detailed plans of the structure can be retrieved from the files of the Burlington Northern Railroad, if necessary.

The freighthouse facility was also destroyed by the 1896 tornado. A 1909 map (Figure 7) indicates a C,B,& Q Railroad freighthouse about 40 feet wide and 500 feet long. A 1911 city map shows this same freighthouse and an additional one to the north that measured 40 feet wide and 400 feet long. It is possible that both freighthouses were constructed at the same time as an inbound-outbound dual facility, but that, for some reason, the second house was omitted from the 1909 map. On the other hand, a 1919 Terminal Railroad valuation map shows only one freighthouse, the southern one indicated on the 1909 map. The facility included a two-story freight office, 40.3 feet wide and 56.5 feet long, with a one-story frame freighthouse, 40.3 feet wide, connected to the back. A brick-paved driveway, 35 feet wide, extended along the south side of the house for truck and wagon access, and the freighthouse service tracks were located on the north side.

A 1922 railroad study by a committee of engineers inventoried the freight-houses and grade crossings in East St. Louis. They reported that the C,B,& Q freight handling facilities consisted of one two-way (inbound/outbound) freight-house, 470 feet long and 38 feet wide, and a platform "near the house," 670 feet long and 8 feet wide (St. Louis Chamber of Commerce 1922:Appendix D).

Examination of aerial photos indicates that there is evidence of freight-house foundation remains in two locations corresponding with the freighthouses located on the 1911 map. Apparently, then, the northern freighthouse that was construed in 1910 or 1911 was demolished sometime before 1919. The fact that the northern freighthouse was never rebuilt, and inbound and outbound operations were combined in the southern freighthouse, suggests that the northern house may have been phased out or substituted with a platform.

A 1954 Terminal Railroad valuation map shows that the two-way freight facilities remained unchanged, with the exception of the two-story freight office, which was removed from the front of the freighthouse. The remainder of the freighthouse, which is apparent on a 1959 aerial photo, was removed by 1964. The railyard of the old C,B,& Q freightyard complex had been used up to the present, though the only building in this facility to last until the



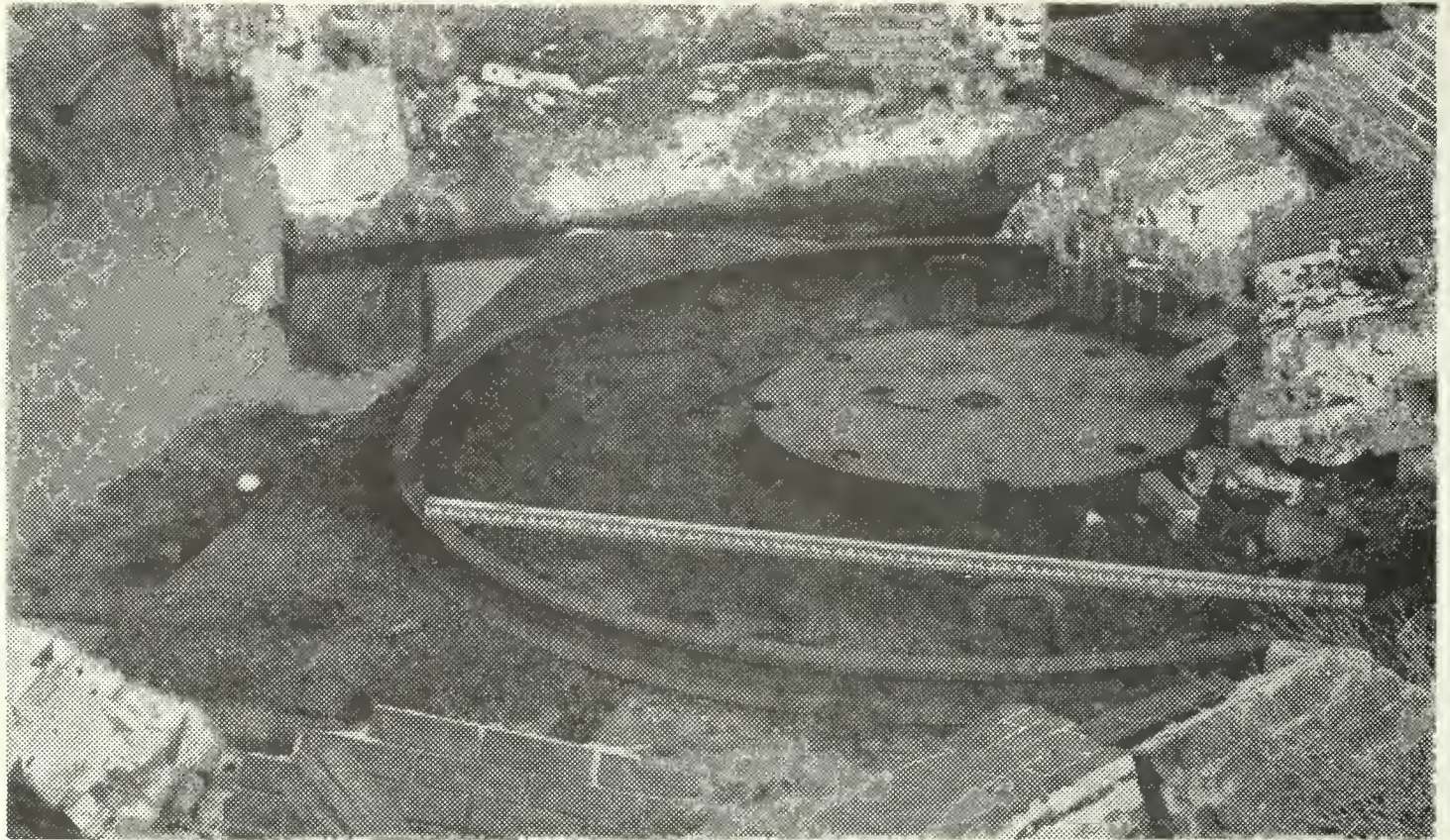


PLATE 40. A. Chicago, Burlington, and Quincy Roundhouse, Turntable Pivot, 1980.

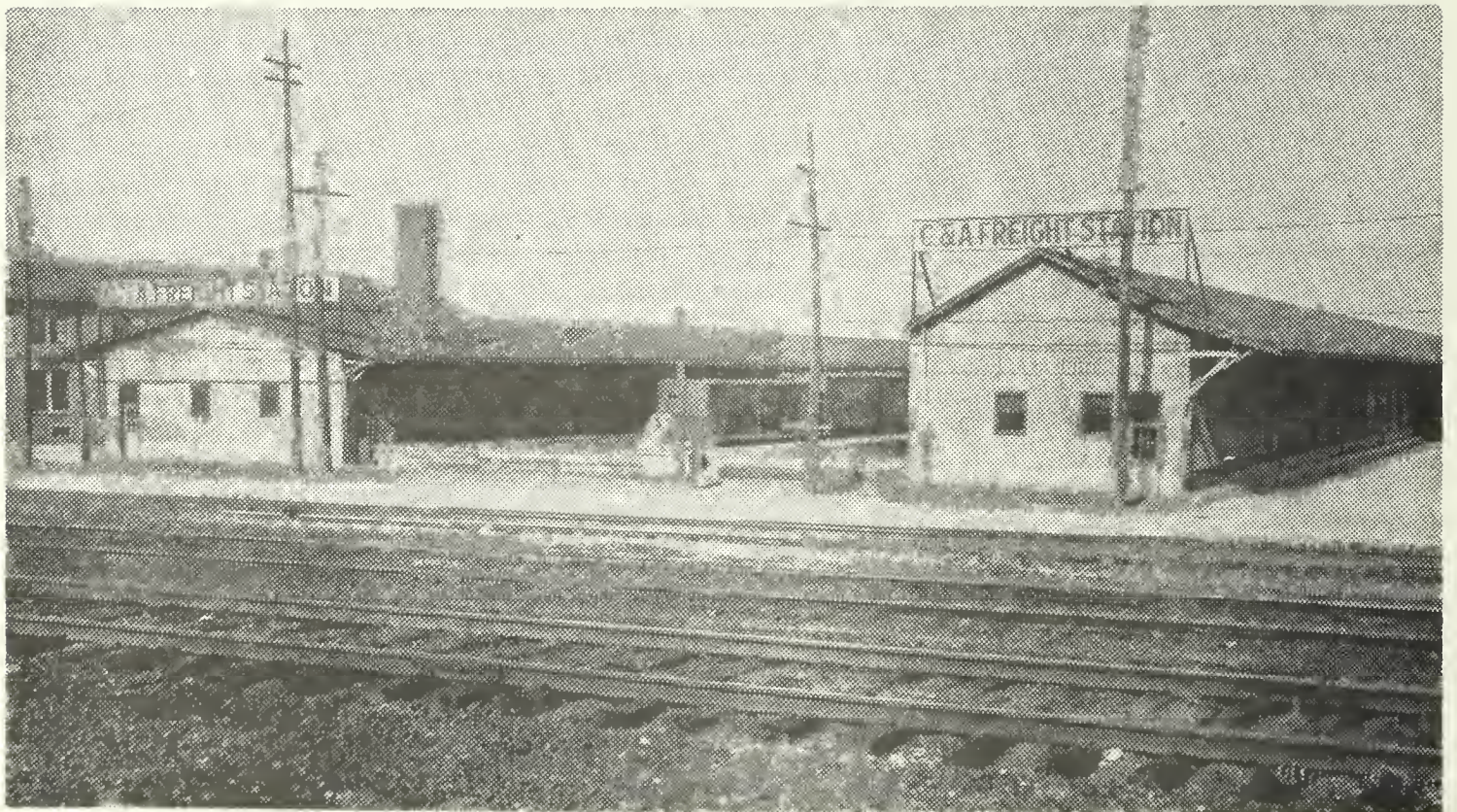


PLATE 40. B. Chicago and Alton Freight Station Complex, 1922. View is to the Northeast. Courtesy of the Missouri Historical Society.



present is a small yard office near the head of the old freighthouse yards. The property of the C,B,& Q Railroad in East St. Louis is presently owned and controlled by Burlington Northern, Inc., a company incorporated in 1961 by the Northern Pacific Railway Company; the Great Northern Railway Company; the Chicago, Burlington, and Quincy Railroad Company; and the Pacific Coast Railway Company (Hanson 1975:358).

## PARCEL 5

Parcel 5 is located between the old Chicago, Burlington, and Quincy freight yard and the Baltimore and Ohio Railroad Company yard (Figure 3b).

The Chicago and Alton Railroad began in 1852 as a rail connection between Alton and Springfield, with a steamer connection from Alton to St. Louis. By 1954 the road was extended to Bloomington, Illinois, with connections to Chicago by way of the Illinois Central and the Chicago and Rock Island Railroads. In 1860, despite strong opposition from Alton interests, a railroad extension to East St. Louis was completed, thus robbing Alton of the advantages of being the terminus for this line (Cole 1922:42-43).

The Chicago, Alton, and St. Louis Railroad acquired a tract of land on Bloody Island between the two land holdings of the Ohio and Mississippi Railroad (Figure 13). By 1874 this tract was being used for both freight handling and engine maintenance. Three freight buildings are shown on the 1874 map, including a 150 foot long building at the south end, a 350 foot long building north of that (both buildings are about 40 feet wide), and at the north end of the tract was a narrow structure 200 feet long and about 20 feet wide. Northeast of these structures, a railroad spur branched off from the freightyard tracks and led to a trapezoidal-shaped building that probably functioned as an engine house. There does not appear to have been a turntable associated with this engine house, indicating that it may have been a single-track facility or dual-track with a frog and switch (Figure 13).

By 1881 the small engine house had been removed from the island and replaced with a 110-degree roundhouse to the north, between Venice and Brooklyn (Figure 9). The freighthouse facilities were changed as well. Two 400 foot-long freighthouse buildings, probably separate inbound and outbound facilities, were located on the Chicago and Alton tract. The turn of the century and the 1896 tornado probably also brought some changes to the Chicago and Alton railroad complex. The 1909 map shows that the roundhouse was replaced by another 110-degree house facing southeast, instead of north. The freighthouse facilities appear to have been little changed, though probably these were all new or repaired buildings on old foundations. The only noticeable difference was the extension of the southern freighthouse by 200 feet, making it 600 feet long. The northern freighthouse was still 400 feet long. The small building, 30 feet wide and 100 feet long, at the south end of the freight complex was the freight office building.

A real change in the freighthouse design occurred between 1911 and 1919. The Chicago and Alton Railroad purchased the triangular tract of land between their original holdings and the Baltimore and Ohio freight yard to the south, and constructed a new freight facility perpendicular to Front Street. A

1919 Terminal Railroad Association valuation map shows two new one-story stucco buildings, 30 feet and 45 feet wide, north of Wiggins Avenue. The northern freighthouse (45 feet wide) included a two-story freight office, 200 feet long, next to Front Street. One hundred feet north of this complex was the old two-story brick and wood frame freight office that was now probably being used for storage. The 1922 railroad study maps and photographs show this same complex and describe the freight handling facilities in detail. There were separate facilities for inbound and outbound freight traffic (Plate 40b). The inbound house (the northernmost structure in this parcel) was 45 feet wide and 594 feet long, and also contained the freight office. There was an uncovered platform, 220 feet long and 10 feet wide, and a covered platform, 594 feet long and 10 feet wide, attached to either side of the inbound freighthouse. The outbound facility included a freighthouse, 30 feet wide and 594 feet long, an uncovered platform, 50 feet long and 30 feet wide, and a second uncovered platform, 15 feet wide and 210 feet long. Both of the platforms were attached to the outbound freighthouse. An additional uncovered "island," 10 feet wide and 600 feet long, was located to handle the overflow (St. Louis Chamber of Commerce 1922:Appendix D). Both structures were stuccoed frame on concrete foundations. The inbound freighthouse had a low gable roof with large eaves overhanging the loading docks on both sides of the building. The outfreight structure had a medium-pitch gable roof that formed an overhanging shelter for the loading docks on the south side of the building only. A large furnace and boiler room provided heat for the inbound freighthouse (Plate 41a). As far as can be determined, the outbound freighthouse remained unheated.

In 1931 the Chicago and Alton Railroad was reorganized, and the Alton Railroad was formed and placed under the control of the Baltimore and Ohio Railroad. In 1947 the Baltimore and Ohio Railroad divested itself of all Alton stock, delivering control to the Gulf, Mobile, and Ohio Railroad (Hanson 1975:312).

These freight facilities remained largely unchanged until after 1959, when the old freight office was destroyed in a spectacular fire in the mid-1960s (personal communication 1980). By this time the Chicago and Alton Railroad property on Bloody Island was controlled by the Gulf, Mobile, and Ohio Railroad. By 1964 the G,M,& O had demolished part of the outbound freighthouse and there seems to have been very little activity around the inbound freighthouse as well. This is compared to aerial views of other operations on the island. The G,M,& O freight facilities north of Trendley Avenue also showed very little activity. In 1971 the Gulf, Mobile, and Ohio Railroad merged with the Illinois Central Railroad to form the Illinois Central Gulf Railroad (Hanson 1975:497), which controls the property today.

An examination of the old Chicago and Alton freighthouse during the field investigations revealed that the inbound freighthouse had burned sometime in the late 1970s. All that remains are ruins of the boiler room, the concrete foundation, and part of the outbound freighthouse (Plate 41b).

The old Chicago and Alton Roundhouse, originally built before 1881 and modified since then, is still in use by the Illinois Central Gulf Railroad. The original 110-degree, north-facing roundhouse on the 1881 map (Figure 9) was expanded with a 30-degree addition to the north side of the roundhouse





PLATE 41. A. Chicago and Alton Freighthouse, Remains of the Boiler Room, 1980.

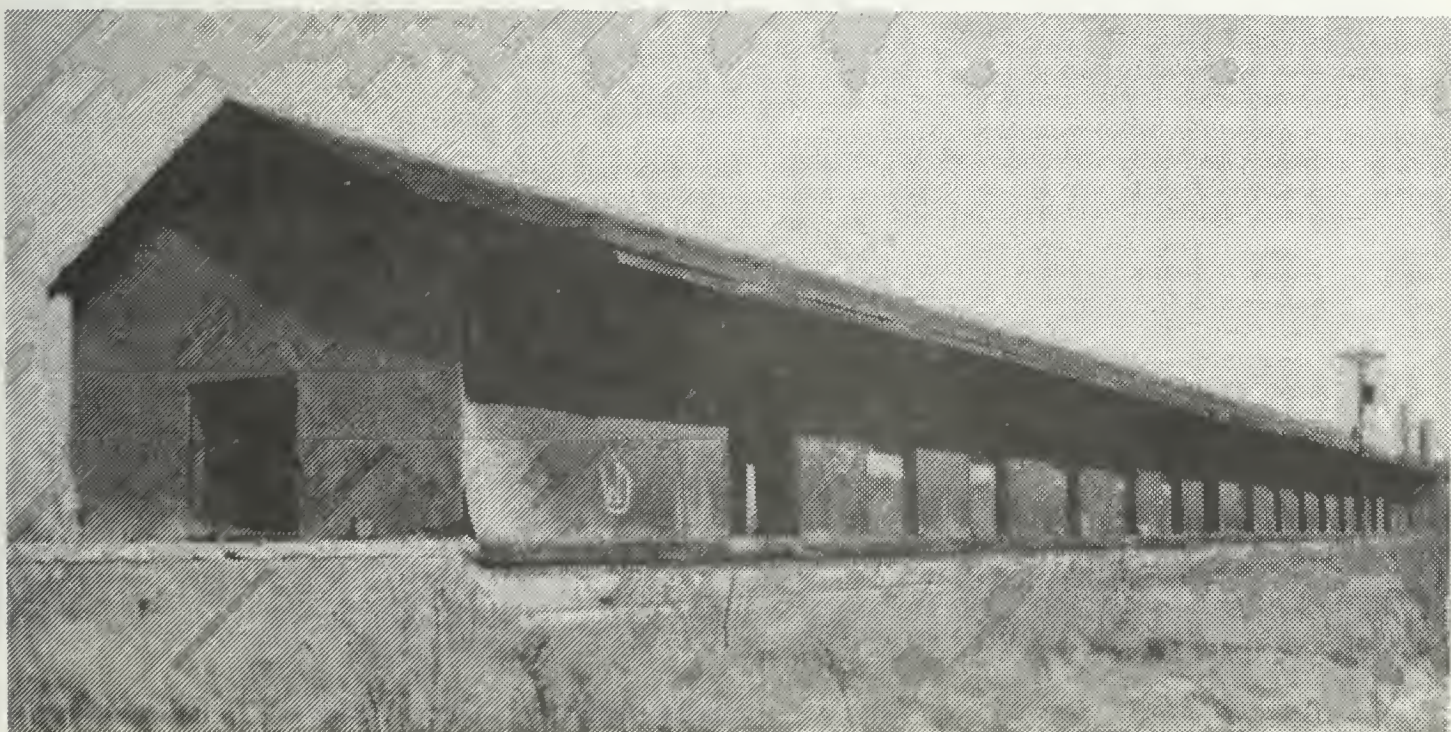


PLATE 41. B. Chicago and Alton Freighthouse, Looking Northeast, 1980.



between 1881 and 1892. This addition is shown on an 1892 map of Madison County. However, by 1909 the 140-degree roundhouse had been replaced or modified to a 100-degree roundhouse. This may signify a completely new structure on the old foundation or a limited demolition of the old facilities, leaving 100 degrees of the north side of the structure still intact. The structure was again expanded between 1909 and 1928 by a 50-degree addition to the south side. This roundhouse configuration has remained unchanged to the present.

The current roundhouse complex includes the east-facing roundhouse, a turntable, and seven or eight associated shops and other structures. The roundhouse has a concrete foundation and floor (Plate 42a). The outside wall is built of brick, and the roof is supported by a post-and-beam frame. A portion of the shed roof contains a clerestory, but it is not known if this continued the length of the roundhouse at one time.

The southern portion of the roundhouse (the post-1909 part) has a taller roof than the pre-1909 northern section with the clerestory (Plate 42b). This structure is one of the few still-operating roundhouse facilities in the MARGE project area. Final recommendations for this site will be made in the summary and recommendations chapter.

#### PARCEL 6

Parcel 6 was described previously with Parcel 4 as both tracts were once owned by the Ohio and Mississippi Railroad. In 1893 the Baltimore and Ohio Railroad took over operation of the southern parcel adjacent to Missouri Avenue (Figure 3b). The Baltimore and Ohio Railroad was the first U.S. public railroad, chartered in 1827 to compete with the Erie canal for trans-Allegheny traffic. The Baltimore and Ohio pushed the connection west by linking up with the Ohio and Mississippi in the mid-19th century to form a connection between New York, Philadelphia, Baltimore, Chicago, and St. Louis (Harris and Levy 1975:220). The absorption of the Ohio and Mississippi and other smaller Illinois railroads by the Baltimore and Ohio was part of a trend of increasing growth of railroad companies in the late 19th century in response to increased competition and the need for long haul capability.

The steady growth of the Baltimore and Ohio Railroad faltered in the years between 1893 and 1896 through depressed business conditions, and the company passed into receivership. In 1899 the B&O was reorganized without foreclosure and receivership was ended. The Baltimore and Ohio Railroad in 1910 purchased the Chicago Terminal Transfer Railroad, including a belt line around the city, Grand Central passenger station, and other Chicago terminal property, thus committing much of its presence and future growth to this northern rival to St. Louis. In 1963 the Baltimore and Ohio came under control of the Chesapeake and Ohio Railroad, which controls the former East St. Louis B&O facilities at the present time (Hanson 1975:311-313).



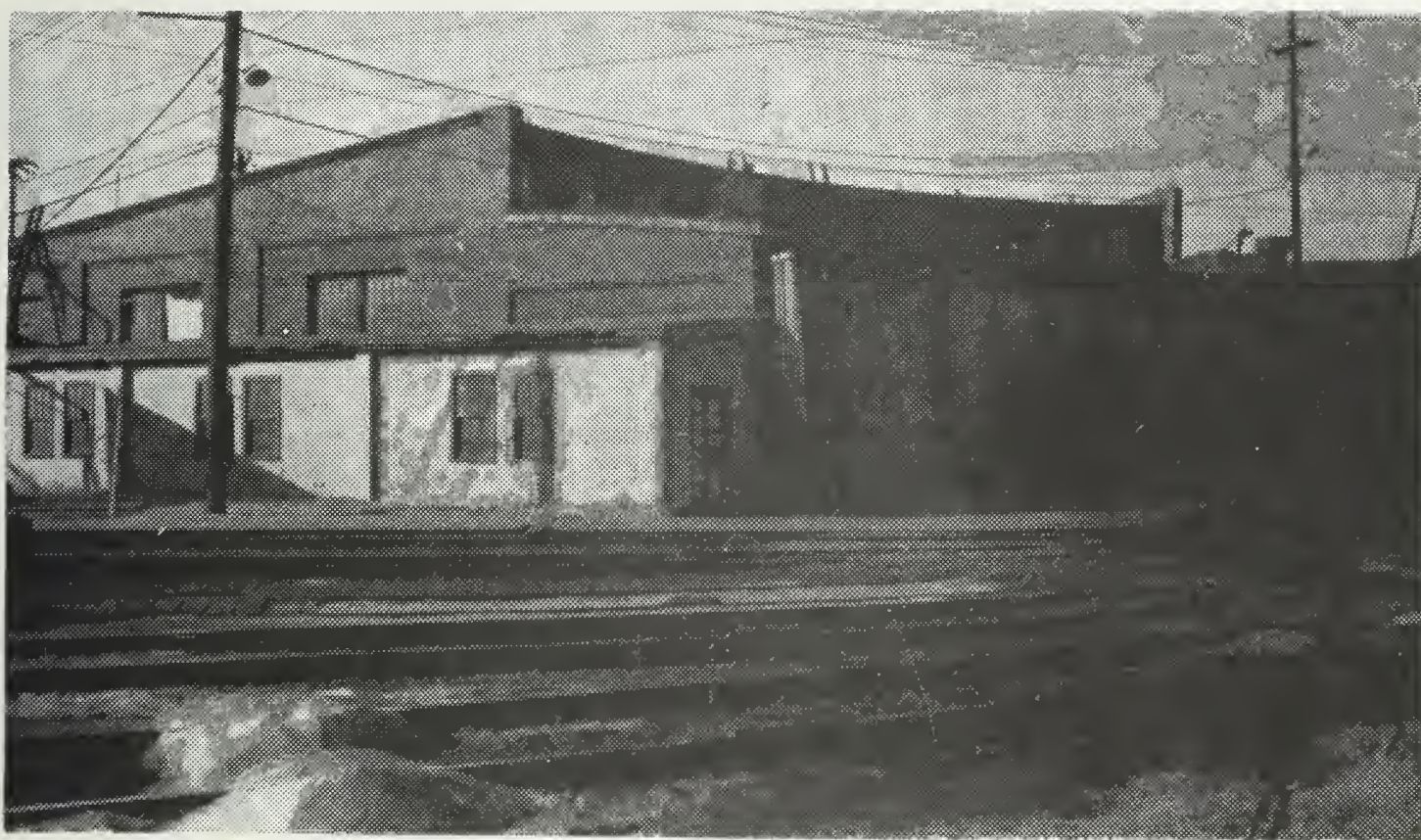


PLATE 42. A. Chicago and Alton Roundhouse, 1980.



PLATE 42. B. Chicago and Alton Roundhouse, 1980.



When the Baltimore and Ohio took over operation of the East St. Louis terminal, the first changes in the facilities probably came after the tornado of 1896. The old Ohio and Mississippi Roundhouse, located east of Cahokia Creek and north of Missouri Avenue (Figure 9), was either demolished previous to the tornado or was simply not rebuilt after its destruction by the high winds. In 1909 the new Baltimore and Ohio Roundhouse was located in the old 1874 location of the O&M machine shop tract, east of Second Street and Illinois Avenue (Figure 7).

The freighthouse facilities that were destroyed by the tornado were rebuilt on the foundations of the ca. 1881 facility. This freighthouse complex has remained largely unchanged to the present, except for slow attrition and loss of structures over the past 70 years. The Sanborn Insurance map of 1910 and a 1922 photograph (Plate 43a) show this facility in its prime. The northernmost structure, the outbound freighthouse, was 24 feet wide and 601 feet long, and included an 8 foot-wide covered platform the length of the house on the south side. The inbound freighthouse (Plate 43a) located along Missouri Avenue, was 60 feet wide and 601 feet long, and also included an 8 foot wide covered platform the length of the house on the north side. At the rear of the inbound freighthouse on the second story was the freight office, 60 feet wide and about 100 feet long. The road sides of the inbound and outbound facilities had bays for loading wagons or trucks directly from the house without use of platforms. Between the inbound and outbound houses were five 10 foot-wide "island" platforms, 594 feet long, each separated by one railroad track. These facilitated quick unloading and loading of freight. A transfer platform, 20 feet wide and 130 feet long, located at the rear of the outbound freighthouse functioned in the handling of outbound freight that did not need long term storage in the house (St. Louis Chamber of Commerce 1922: Appendix D).

The outbound freighthouse facilities were demolished or lost by fire between 1959 and 1964. Only the inbound freighthouse still exists (Plate 43b). It consists of a 2-story, 25-bay frame freighthouse that measures 500 feet long, and an attached, 100 foot-long, 2-1/2 story office structure. The entire building rests on a coursed limestone rubble foundation. Each bay of the freighthouse measures 20 feet and is centered with an overhead door measuring 9'6". Sheltering the loading areas on both the rail and the road sides of the structure is a pent roof. Above each pent roof and running the length of the freighthouse is a clerestory, consisting of 25 sets of triple 9-pane windows. The freighthouse possesses a low gable roof and is covered with horizontal weatherboarding. The loading bay doors are sheathed with diagonal siding (Plate 44a).

The office structure is also sided with horizontal weatherboarding. It has a low gabled roof with four gabled dormers that face north and south (Plate 44b). The building was heated by a furnace located in the northeast corner. At one time, an oriel on the east end of the north side of the office building allowed observation of the loading platforms and the yards.

The B&O Freighthouse is in an advanced state of disrepair. It now sports the faded yellow ochre and brown colors of the Chesapeake and Ohio





PLATE 43. A. Baltimore and Ohio Freighthouse in 1922, Looking Northeast. Courtesy of the Missouri Historical Society.



PLATE 43. B. Baltimore and Ohio Freighthouse in 1980, Looking Northeast.





PLATE 44. A. Baltimore and Ohio Freighthouse in 1980, Looking Southwest.



PLATE 44. B. Baltimore and Ohio Freight Office, Looking Northwest, 1980.



Railroad, and the tile roof is gone, portions of the pent roofs have fallen, and there have been several modifications to its appearance in recent years. Photographic documentation of the structure includes both recent photographs (Plate 44) and a 1922 photograph taken by Charles C. Holt (Plate 43a). Because of the deteriorated condition of the structure, it does not meet the minimum criteria for inclusion in the National Register of Historic Places. Final recommendations for the site will be made in the summary and recommendations.

#### PARCEL 7

Parcel 7 is located on the island between Mullikin Avenue on the north, and Broadway Avenue to the south. The first railroad to enter this parcel of land in 1870 was the St. Louis, Vandalia, and Terre Haute Railroad, which had been planned and discussed since the 1840s.

In 1847 the railroad was proposed as the Atlantic and Mississippi Railroad, which would connect the cities of St. Louis and Indianapolis or Terre Haute. However, the railroad was opposed by Illinois special interests who desired to see Alton, Illinois, become the western terminus of the east-west railroad in keeping with the Illinois "state policy" of building up cities within the state rather than rival St. Louis (Cole 1922:32-33). The fight between the state policy people and the liberal or "free field" advocates escalated as politicians, city boosters, and financiers took sides. The proponents of the proposed Alton and Terre Haute Railroad squared off against the boosters of the Atlantic and Mississippi Railroad (St. Louis and Terre Haute) in the Illinois state legislature, and for four years the battle went on. When the Ohio and Mississippi Railroad received legislative sanction in 1851, the O&M backers, who had previously supported a liberal railroad policy common with the Atlantic and Mississippi Railroad, now saw the A&M as a possible competitor for financial support and joined the Alton and Terre Haute boosters against this second east-west railroad (Cole 1922:43-44).

Finally, in 1853 the Ohio and Mississippi was on firm financial ground, and the Atlantic and Mississippi supporters pressed the state legislature again. With the support of the governors of both Illinois and Missouri and other influential persons, the Atlantic and Mississippi was finally able to secure a charter and end the state policy plan. However, after winning the battle in the legislature, the Atlantic and Mississippi Railroad (St. Louis and Terre Haute) fell through in the financial panic of 1857, and was not pursued again until after the Civil War (Cole 1922:44-46).

The St. Louis, Vandalia, and Terre Haute Railroad was finally completed in 1870. It extended from Illinoistown to Vandalia, where it followed the route of the Old National Road to Terre Haute, Indiana. From Terre Haute, it extended east to Indianapolis with connections to Cincinnati, Pittsburgh, and New York (Reavis 1876:124).

By 1874 the St. Louis, Vandalia, and Terre Haute Railroad had freight and engine maintenance facilities on Bloody Island (Figure 13). The south-facing, 70-degree roundhouse with a turntable was located on the old shoreline west of Cahokia Creek and Brooklyn Avenue. The freight facilities along

the corner of Broadway and Front Streets were located in part of the Middle Patch, as this island residential settlement was called. These facilities included a freighthouse, 200 feet long by 50 feet wide, along Front Street, and a 600 foot-long by 30 foot-wide freighthouse at the north end of the freightyard. Two small structures located on Front Street (Figure 13) were non-railroad commercial establishments, holdovers from the mixed commercial/residential enclave that preceded the St.L,V,& TH (Vandalia) Railroad on the island.

The 1881 Army Corps of Engineers map (Figure 9) indicates that, seven years later, the Vandalia Railroad had two substantial freight buildings (probably dual inbound/outbound houses) approximately 550 feet long and over 50 feet wide. The roundhouse had been rebuilt or expanded from 70 degrees to 180 degrees.

Photographs of the tornado cleanup (Plates 7, 8, 9, and 10) would suggest that the Vandalia facilities, like so many other railroad structures on the island, were devastated in 1896. The freighthouse facilities rebuilt after the tornado are shown in the 1909 map (Figure 7). The freighthouse adjacent to Broadway Avenue was the outbound house, and the northern structure was the inbound facility. The structure along Broadway and east of B Street was a freight warehouse associated with the Vandalia Railroad. The inbound house was 60 feet wide by 570 feet long, and the outbound house was 40 feet wide and 540 feet long (St. Louis Chamber of Commerce 1922:Appendix D).

The Vandalia Roundhouse (Figure 33) is absent from the 1909 map, though it appears in a 1910 Sanborn Insurance map and a 1908 chart of the Mississippi River by the Army Corps of Engineers. It must be assumed that the roundhouse was repaired or rebuilt within seven years (at least) of the tornado. The insurance map shows an 85-degree, southeast-facing roundhouse with a 65-foot diameter turntable. The track on the east side of the house was a locomotive washing spur with a water hydrant and hose located nearby. Other buildings included a machine shop, water tank, office, oil house, sand house, and other structures (Figure 33). The roundhouse corresponds with the configuration of the ca. 1874 Vandalia Roundhouse (Figure 13), and might have been located exactly on the old foundation. By 1915 the Vandalia Roundhouse had been modified by the removal of the eastern 35 degrees of the structure, leaving a 50-degree roundhouse.

In 1918 the Vandalia Railroad passed in control to the Pennsylvania Railroad. Sometime between 1910 and 1932, according to available maps, the Pennsylvania Railroad phased out the old Vandalia Roundhouse and built a new facility off the mainline, between Cahokia Creek and Collinsville Avenue (Figure 3b). The site of the old Vandalia Roundhouse was between the McKinley Bridge approach and old Eads Bridge railroad approach. A field inspection of the area revealed that many of the freight yard approach tracks are still intact and the oil and sand house foundations preserved. However, the foundations of the roundhouse, turntable, and machine shop were removed during demolition and no intact remains were noted.

The freight complex continued to be used during the Pennsylvania Railroad control after 1918. A 1906 view of Front Street from Eads Bridge shows the Vandalia Freighthouse (Plate 12a, structure across street from the grain elevator). A 1922 photograph of the complex (Plate 45a) primarily shows the inbound



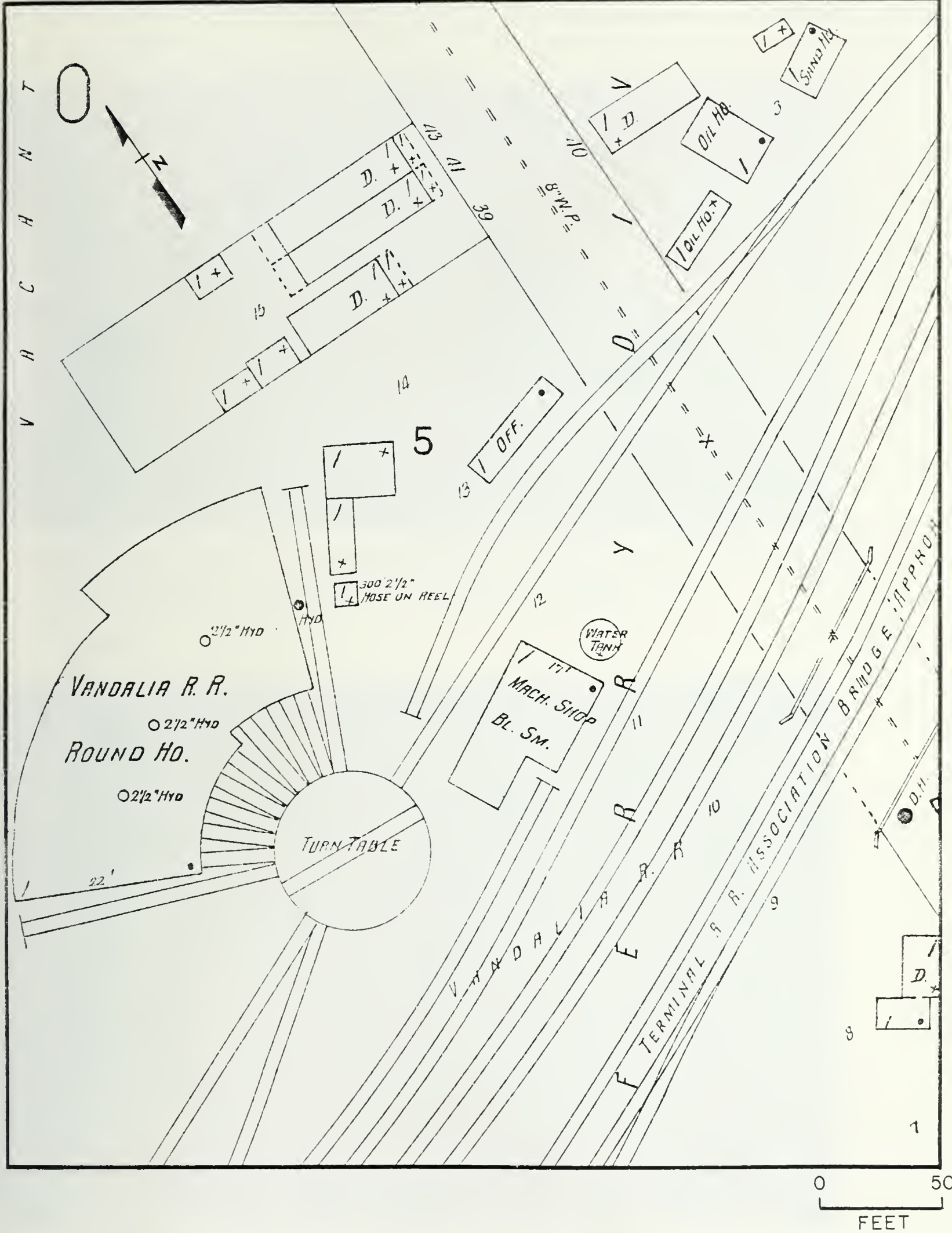


FIGURE 33. Vandalia Roundhouse, from the 1910 Sanborn Insurance Map. Courtesy of the University of Illinois Library.



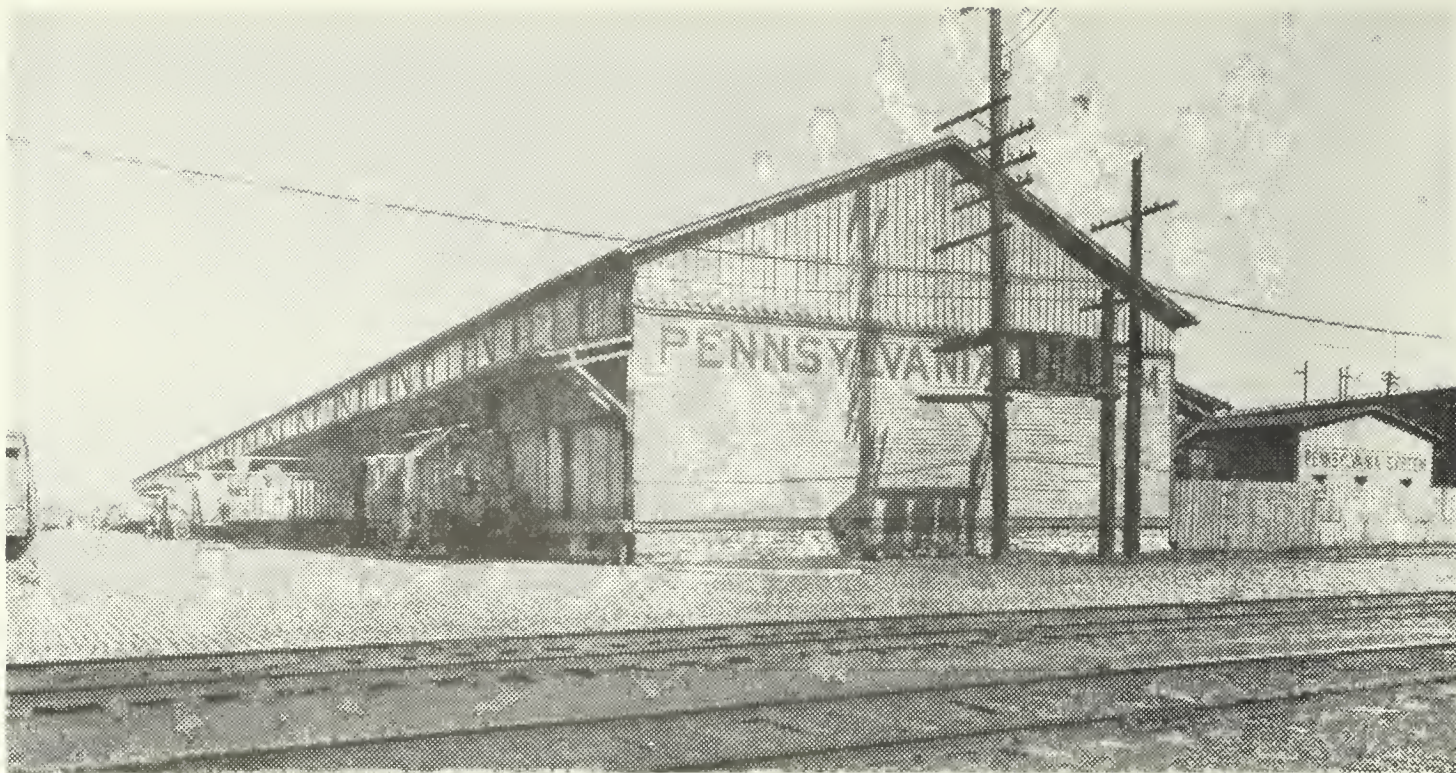


PLATE 45. A. Pennsylvania (Vandalia) Freighthouse in 1922, Looking Southeast. Courtesy of the Missouri Historical Society.



PLATE 45. B. Pennsylvania Freighthouse Remains, 1980. View is to the Southeast.



freighthouse, although a portion of the outbound freighthouse can also be observed behind the vertical plank fence that shielded the tracks from Front Street. From what can be seen of the outbound freighthouse, it appears to have been a two-story frame structure with a low gable roof and vertical plank siding. The inbound freighthouse was built on an uncoursed limestone rubble foundation. It was a frame, two-story structure with a low gable roof and 32 bays. The loading docks on both the rail and the street sides of the freighthouse were protected by pent roofs. The structure was sided by a combination of vertical, horizontal, and diagonal siding. The second story windows in each bay consisted of 16 panes.

The inbound structure was still standing in a 1959 aerial photograph, though the outbound structure had already been demolished. However, at this time the inbound house was being leased to the Hershey Chocolate Corporation and used as a warehouse (Sanborn-Parris Insurance Map 1955). In 1968 the Pennsylvania Railroad merged with the New York Central Railroad to form the Penn Central Transportation Company. This railroad is currently controlled by Consolidated Rail Corporation (Conrail). At some point between 1975 and 1978, the remaining inbound freighthouse was demolished. All that remains at present is the limestone foundation of the inbound freighthouse (Plate 45b). Both the old freighthouse and roundhouse sites have been impacted to a degree that no further research or historical value remains. Final recommendations will be made in the summary and recommendations chapter.

#### PARCEL 8

This tract of land is located between Broadway Avenue and Bogy Street, south of the Eads Bridge (Figure 3b). The first railroad into this tract of land was the St. Louis and Southeastern Railroad, chartered in 1869. The St. Louis and Southeastern extended east to Evansville, Indiana. From there, it had connections all the way to Nashville, Tennessee (Reavis 1876:88, 118). A look at the map of 1874 reveals that the railroad had no freighthouse or track facilities on the island at this time, though, not shown on this map, an engine facility with a roundhouse and other support buildings was located at the corner of Illinois and Fourth Streets (Figure 13).

Between 1874 and 1881 various railroads in Kentucky, Tennessee, southern Illinois, and Indiana were combined to form the Louisville and Nashville Railroad system. These railroads included the St. Louis and Southeastern; the Louisville, Henderson, and St. Louis Railway Company; the Louisville and Nashville Railroad; and others (Hanson 1975:586-613).

The 1881 map shows that the Louisville and Nashville Railroad adopted the old St. Louis and Southeastern Railroad Roundhouse on the mainland and extended a line just south of Eads Bridge to the grain elevator on the shoreline. However, no freight facilities were evident at this time (Figure 9). By 1886 the Louisville and Nashville Railroad had a freighthouse because it is documented that the L&N freighthouse was burned during a riot between railroad strikers and deputies (Smith and Lange 1980:50). Views of the destruction from the 1896 tornado (Plate 7) indicate that the L&N Railroad had freight facilities on this parcel before the turn of the century. However, there are no maps or photographs available to show exactly how the freight facility was designed.

If the pattern of the other railroads with facilities destroyed by the tornado holds true for the L&N, it can be hypothesized that the post-1900 freight facilities were built largely on the foundations of the 19th-century structures.

The map of 1909 (Figure 7), the 1915 Louisville and Nashville valuation maps, and a 1919 view (Figure 31), along with 1910 Sanborn Insurance maps, provide a detailed view of the post-tornado facilities. The maps show a single freighthouse and a loading platform along Bogy Avenue (the southern end of the L&N tract), and railroad tracks in the area between the platform and Crooks Street (vacated for the Eads Bridge). The Sanborn Insurance map indicates that these were coal tracks. Five small offices with scales located along Front Street in front of the coal tracks were probably associated with the local distribution of coal by wagon from these facilities. A Wiggins Ferry connector track across Front Street served as an outlet for coal cars that were then loaded onto ferries. Plate 7 of the tornado damage looking south from Eads Bridge presents a view of some of the Louisville and Nashville coal cars waiting on the Wiggins Ferry tracks.

The Louisville and Nashville freighthouse, a combined inbound/outbound facility, is well documented by photographs and maps. The maps show an office measuring 50 feet by 85 feet, an adjoining freighthouse that measured 48 feet by 562 feet, two sets of tracks, a loading platform that measured 20 feet by 562 feet, and another two sets of tracks. According to the Sanborn map, the freighthouse portion of the complex was constructed of corrugated iron on a wooden frame.

The L&N freighthouse is shown in Graf's 1906 view of the riverfront from Eads Bridge (Plate 12b). A 1922 photograph of the L&N freighthouse provides additional information concerning the former appearance of this structure (Plate 46a). The photograph depicts a handsome, 2-1/2 story, frame office with an adjoining 1-story freighthouse. The office had a pyramidal roof with four cross gables, and two irregularly-placed interior chimneys. A cornice extending around the structure, just below the eaves, was embellished with double brackets and dentils, but the cornices on the gables were plain. The office was sided with horizontal weatherboarding, except for the area between the 1st-floor windows and the 2nd-floor windows, where two string courses marked the edges of a vertically sided band. Within this band was lettered "LOUISVILLE & NASHVILLE R.R.". Over the front door was a hood supported by brackets. The freighthouse had a gable roof with projecting eaves that protected the loading docks. Both the office and the freighthouse were built on concrete foundations.

Apparently, the freighthouse existed on this site up to the 1960s. A letter, dated 1967, in the files of the L&N Railroad, offers some information about the date of demolition. The document is a letter of interest from a local construction company asking for the opportunity to bid on construction of "a new freight terminal to replace the one lost in a fire". The freighthouse is depicted on a 1964 aerial photo so it may be assumed that the fire occurred in the years between October 1964 and May 1967. The freighthouse was never rebuilt and the property today is used by a "piggyback trucking firm".





PLATE 46. A. Louisville and Nashville Railroad Freight Office and House, 1922. View is to the Northeast. Courtesy of the Missouri Historical Society.

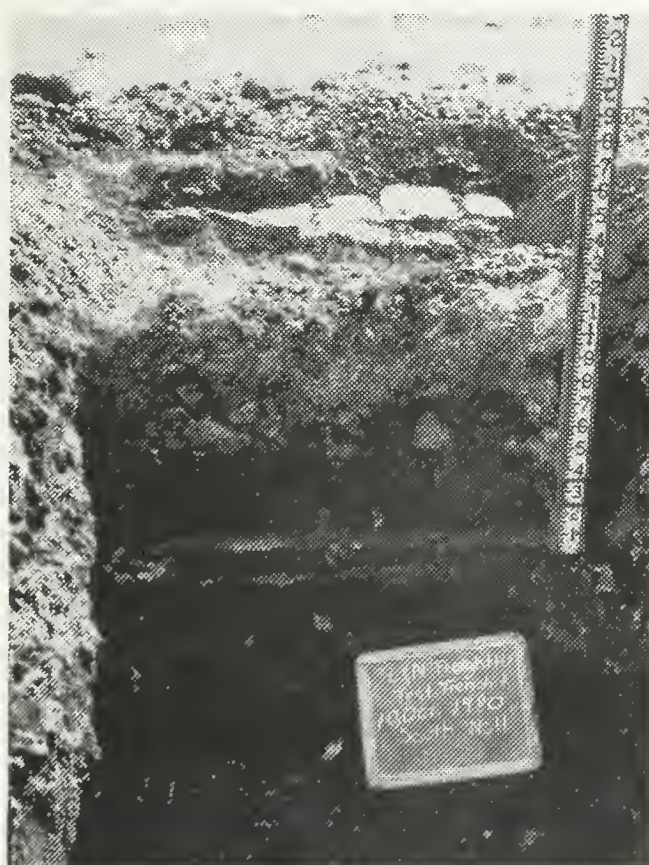


PLATE 46. B. Louisville and Nashville Freighthouse Excavations, Backhoe Trench, 1980.



## Archaeological Investigations at the L&N Freighthouse

An archaeological investigation of the L&N freighthouse was conducted to determine whether intact archaeological deposits had survived demolition of the freighthouse in the 1960s. A backhoe was employed to examine the deep deposits. The backhoe trench, 3 feet by 12 feet and placed perpendicular to the south foundation wall of the freighthouse (Figure 34), was excavated to a depth of 6 feet. The ground surface datum was established at the level of the granite-paved roadway (Bogy Avenue) between the L&N and the C,C,C,& St. L freighthouse. A remnant of the south foundation wall of the house was located just below the white gravel parking lot surface, about 2 inches below ground surface (Plate 46b). At a depth of 1.2 feet below surface, evidence of the interior end of the foundation was located, indicating a total width of approximately 1.8 feet for the house footing. At 5 feet below surface, a 2.5 inch waterpipe running roughly east to west inside and parallel to the foundation wall was located. Examination of the Sanborn Insurance maps of 1910 indicate a waterpipe system extending the length of the wall linking water hydrants inside the freighthouse. The test trench extended to a final depth of 6 feet below surface and was terminated.

The soil deposits in the trench consisted of sandy loam and cinder with cultural material including ceramics, nails, building material and hand truck wheel parts (Plate 47). It would appear that most of the remains of the freighthouse foundation were either sheared off directly at ground surface or completely removed by heavy machinery, since much of the site is in a slight depression lower than the granite-paved road. The L&N freighthouse does not offer any potential research value and no further archaeological investigations are recommended.

### PARCEL 9

Parcel 9 is located south of Bogy Avenue and north of Jarrot Street (Figure 3b). The heated battle between the "state policy" supporters and the proponents of an open liberal railroad policy going on in the mid-19th century has been discussed previously. The state policy boosters who were campaigning for a major railroad through Alton, Illinois, supported the Terre Haute and Alton Railroad plan over the Terre Haute and Illinoistown proposal backed by the Atlantic and Mississippi Railroad boosters. Despite the triumph of the Terre Haute and Illinoistown supporters in beating the narrow state policy plan, the panic of 1857 prevented this road from being constructed until 1865. However, the Alton backers did manage to gain financial support for their plan, and by 1853 the Terre Haute and Alton Railroad was completed between those cities.

However, Belleville, Illinois, financiers who were upset at being bypassed by the Ohio and Mississippi Railroad constructed a railroad to Illinoistown in 1854, and shortly after carried an extension to Wood River where it met the Terre Haute and Alton Railroad (Cole 1922:44-46). Thereafter, the Terre Haute and Alton Railroad and the Belleville and Illinoistown Railroad consolidated as the Terre Haute, Alton, and St. Louis Railroad. The new railroad temporarily leased a tract of land in 1856 on Bloody Island along Front Street between Crook and Pratt Streets. Later they exchanged this land for a terminal station between Bogy and Pratt Streets (Reavis 1876:63).



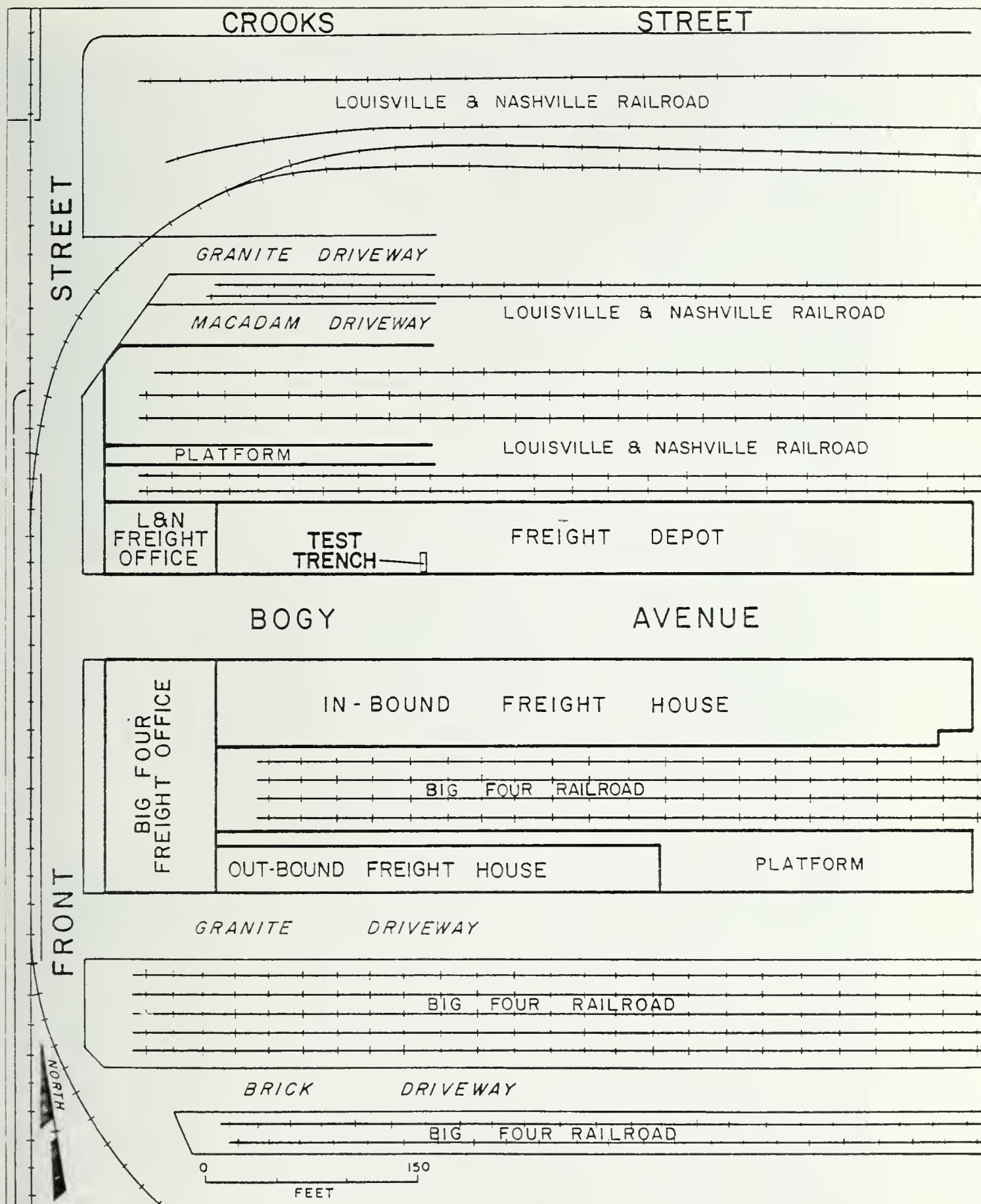


FIGURE 34. Louisville and Nashville Railroad Freight House Site Plan, from the 1919 TRRA Valuation Map. Courtesy of the Terminal Railroad Association.



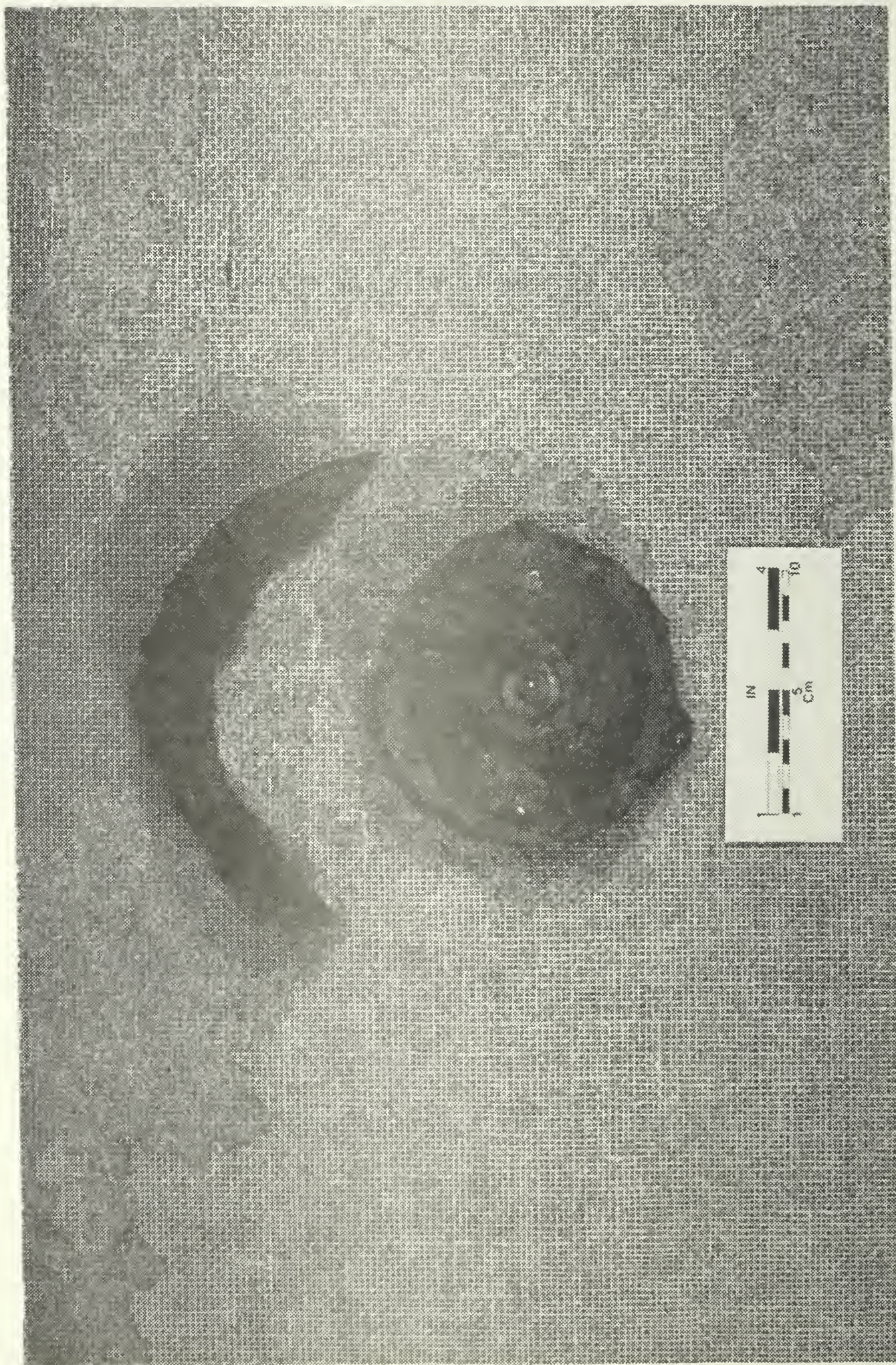


PLATE 47. L&N Freighthouse Excavations, Hand Truck Wheel Parts.



In 1861 the railroad was sold under foreclosure and reorganized as the St. Louis, Alton, and Terre Haute Railroad. In the reshuffling that followed, the old Illinoistown and Belleville Railroad was organized as the Cairo Shortline and operated as a lessee of the St.L,A,& TH Railroad. Moreover, the Indianapolis and St. Louis Railroad leased the St.L,A,& TH Railroad mainline from Terre Haute to Illinoistown (Tyson 1875:55; Wilderman and Wilderman 1907:793).

During the late 1850s and 1860s, both the Cairo Shortline and the St. Louis, Alton, and Terre Haute Railroad had close relations with the Illinois Central Railroad. The Illinois Central, a north-south line, extended from Chicago to Cairo, Illinois, and was in a position to help out and benefit from these two east-west railroads. The IC and the St.L,A,& TH connection at Pana, Illinois, provided an opportunity to run trains directly from Chicago to St. Louis. This combination provided the first through-line between those cities, and gave stiff competition to the Chicago and Alton Railroad, especially from 1857 until 1860. In 1869, when the Illinoistown and Belleville Railroad extended a connection to DuQuoin, this lessee of the St.L,A,& TH Railroad provided a route through the Illinois Central connection between DuQuoin and Cairo with Chicago, St. Louis, and Cairo (Brownson 1915: 68-69).

While the Indianapolis and St. Louis Railroad operated as a lessee of the St. Louis, Alton, and Terre Haute Railroad, they had lease rights to the Illinoistown Roundhouse, located southwest of Illinoistown (Figures 3b and 13), which had been built shortly after 1861. The engine facilities of the St. L,A,& TH Railroad were located on the old shoreline south of Bogy Avenue, and the freight depot was located on the island along Front Street.

The 1874 map of the island (Figure 13) depicts these facilities. On the mainland, the engine facilities consisted of a full-circle roundhouse and a railyard. West of the roundhouse were the freight yards and houses. Two freighthouses, both dual inbound-outbound houses, included a 50 by 400 foot structure to the south and a house 50 feet wide and 500 feet wide on the north end. The smaller square structures at the northwest end of the tract were also associated with the freight depot. The 1881 map (Figure 9) shows little or no change in the engine and freighthouse facilities. Not unexpectedly, the freight facilities were wiped out by the 1896 tornado (Plate 7).

The rebuilt freight facilities were located further north, next to Bogy Avenue. The 1909 map (Figure 7) shows the configuration at this time. Plate 12b, a 1906 view of the riverfront, also depicts the freighthouse (located south of the L&N freighthouse). The inbound freighthouse was 560 feet long and about 50 feet wide. The outbound house, located south of the inbound house, was 560 feet long and about 30 feet wide (Figure 8). The freight office located at the head of the inbound freighthouse was a two-story wooden frame building with a jerkin head roof (clipped end gable) over the attic (Plate 12b).

Between 1911 and 1919, the freight facilities were changed again. A new freight office was made by duplicating the old freighthouse, complete with jerkin roof, at the head of the inbound freighthouse, and connecting the two buildings in the middle along Front Street. This freight office is shown in a 1922 photograph (Plate 48a). The sign on the roof proclaims the facilities as the "Big Four Route," officially the Cleveland, Cincinnati, Chicago, and St.





PLATE 48. A. Big Four Freighthouse and Office in 1922, Looking Northeast.  
Courtesy of the Missouri Historical Society.



PLATE 48. B. Big Four Freight Office in 1980, Close-up of the Upper Southwest Corner.



Louis Railroad, a subsidiary of Vanderbilt's New York Central lines (Plate 48a), which came into control of the St. Louis, Alton, and Terre Haute Railroad and the Indianapolis and St. Louis Railroad in 1889 (Hanson 1975:226). An almost "homey" atmosphere was created by the presence of awnings on the 2nd-floor windows in the west facade. The southernmost freighthouse, which consisted of at least 14 loading bays, was lit by a clerestory beneath the pent roof. Both the visible freighthouse and the office were sided with horizontal weatherboarding (Plate 48a).

The first freighthouse was apparently demolished during the mid-1920s, because in 1928, a second, and more substantial, freighthouse was built in its place. From all appearances, this building probably served as a major terminus for the company. The office was three stories tall, built of iron and concrete with brick walls built in American common bond, and rests on a concrete foundation. In the southwest upper corner is a built-in, glazed tile sign that reads "Big Four Route" (Plate 48b). Above that, in a smaller, glazed tile medallion, is a sign that reads "New York Central Lines". Above the northwest door is a carved marble sign that reads "C.C.C & ST. L. RY." (Plate 49a). The building is handsomely decorated with vertical bands of yellow-glazed terra cotta facing connected with a horizontal string course and coping, much in the Art Deco style that flourished from 1925 to 1940. The interior of the structure consists of large open spaces where the freight-handling business of the line was once handled.

The structure is in a remarkably good state of preservation, and its historical and photographic documentation is relatively complete. It appears to qualify for nomination to the National Register of Historic Places on the basis of age, construction, design, and integrity. It is recommended that the structure be considered as a subject for adaptive re-use.

The railroad roundhouse shows up in 1910 Sanborn Insurance maps (Figure 35) and the 1909 map (Figure 7) as a 135-degree roundhouse with turntable and a coal shed, sand house, office, with an oil house and machine shop attached to the roundhouse. By 1928, the structure attached to the roundhouse containing the machine shop and oil house had been removed except for the large chimney and boiler system at the southeast corner of the roundhouse. The function of the chimney is a little puzzling. The chimney could have served only to draw off fumes from a boiler in the machine shop. It could also have been a smoke flue for carrying off the gasses and fumes from engines in the roundhouse. Such a ventilation system is discussed by Berg (1893) in his compendium of railroad buildings and structures of the 19th century. In the design outlined by Berg, a system of horizontal pipes connecting with the chimney outside the roundhouse was hung from the roof trusses over each engine stall. Extending down from this horizontal pipe was a vertical tube with a damper and a bell-shaped end to fit over the smokestack of each engine standing in the house. The draught created in the tall chimney outside the house caused the fumes and smoke to be drawn into the vertical pipe to the horizontal pipe and out the chimney. The chimney cited by Berg was 100 feet high and could draw smoke from engines 500 feet from the stack (1893:185-186). The chimney at the Big Four roundhouse seems to fit the specifications of the ventilation stack discussed by Berg. It is over 100 feet high, it has an opening about 9 feet above the base which could have been the receptacle for the horizontal flue, and it has an opening at the base, probably for cleaning smoke residue (Plate 49b).



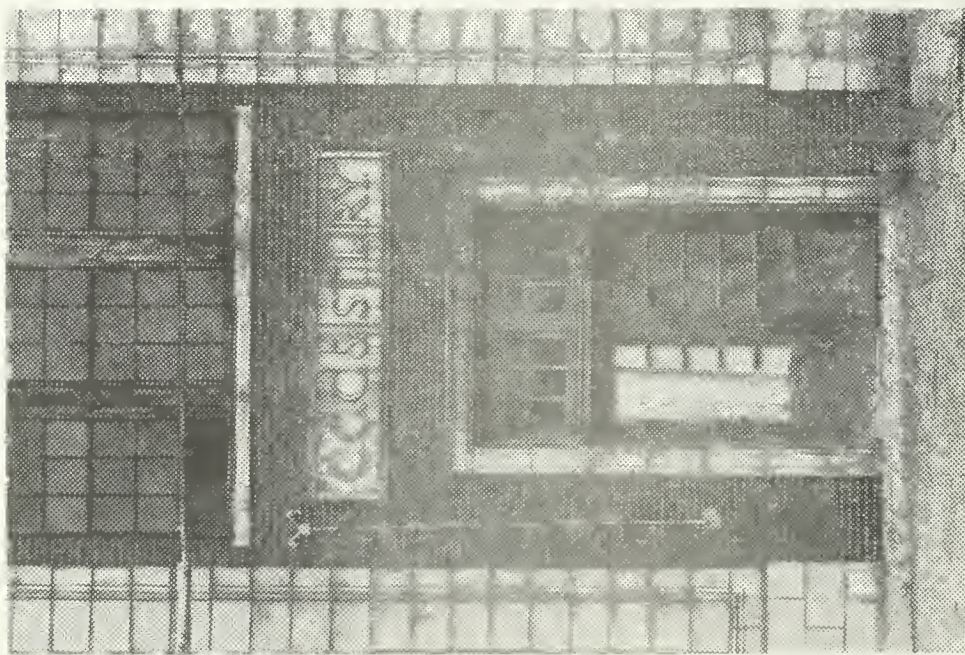


PLATE 49. A. Big Four Freight Office, Close-up of Sign over Northwest Entrance, 1980.

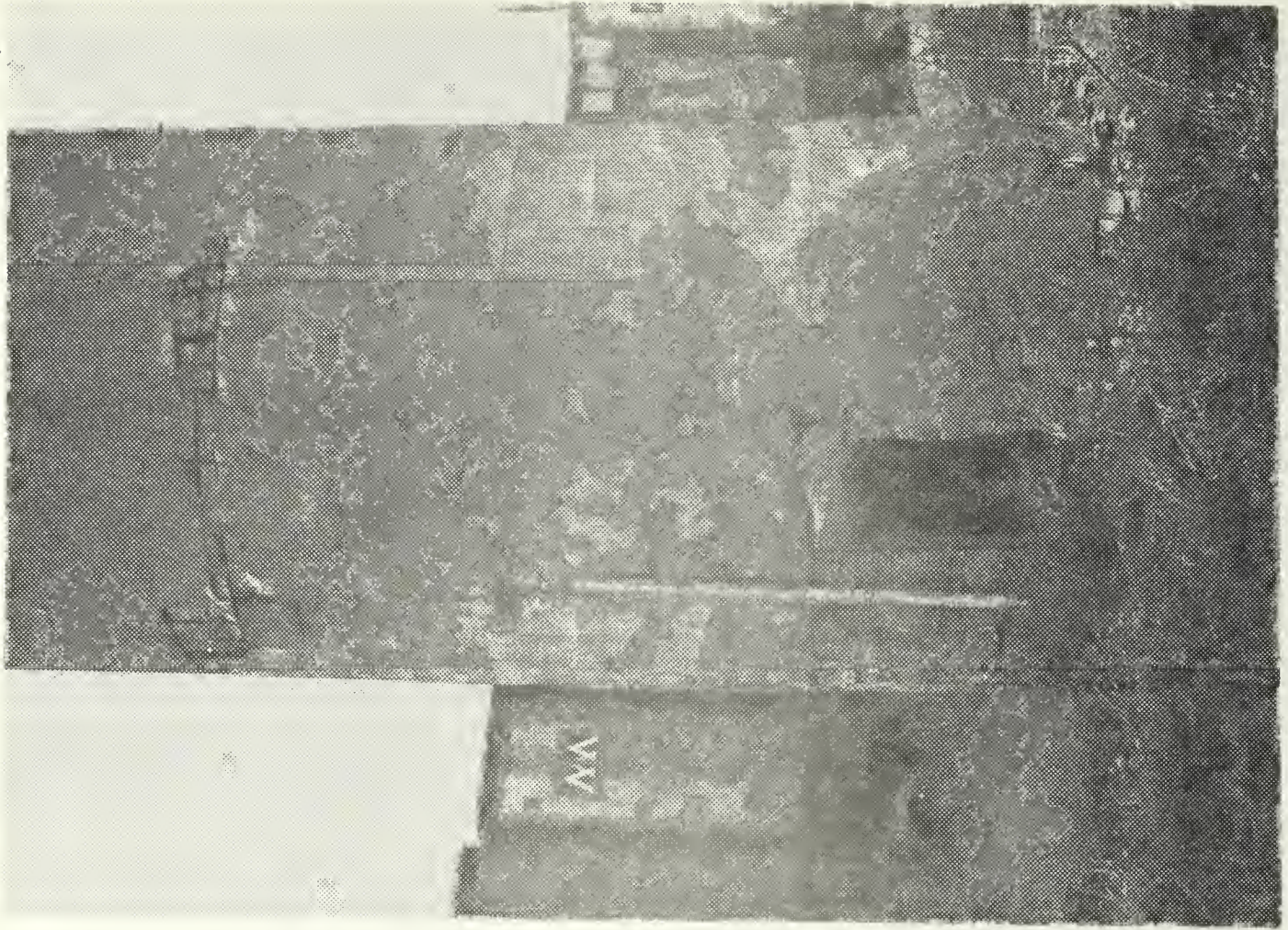


PLATE 49. B. Big Four Roundhouse, Base of Chimney Stack, 1980.



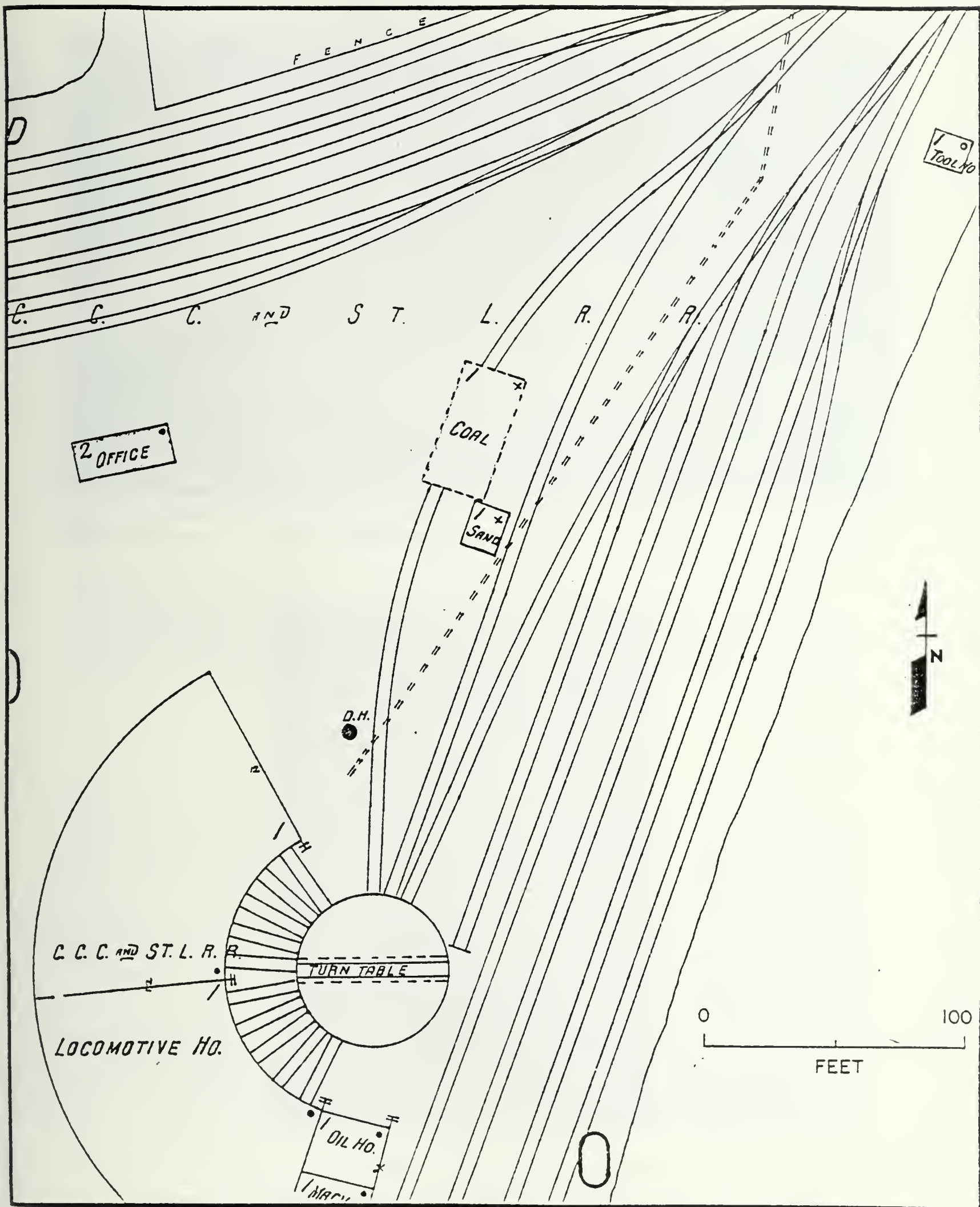


FIGURE 35. Big Four Roundhouse, from the 1910 Sanborn Insurance Map.  
Courtesy of the University of Illinois Library.

The Big Four roundhouse facility burned sometime between 1959 and 1964. By 1975 all that remained of the site was the turntable, chimney, office, and foundations. By 1978 the turntable was removed and the pit filled. At the time of the field survey (1980), even the office had been demolished (Plate 50a), though the foundation outline of the turntable and coach yards were still visible (Plates 50b and 51a). The roundhouse, chimney, and turntable pit are all concrete. The coach yards, which were located north of the roundhouse, are 150 feet long by 50 feet wide and contained four parallel tracks for parking and servicing passenger cars. Alongside each track ran a shallow trough that housed plumbing and other utility lines for the coach facility (Plate 51a). Believed to be associated with the coach yard is a rectangular foundation west of the roundhouse, 100 feet long by 50 feet wide. However, its function within the coach yard system is unknown.

The Big Four roundhouse and coach yard facility has been completely razed except for the foundations, and does not meet the criteria of the National Register of Historic Places. The foundations of the buildings are represented on aerial photographs and other maps, and so no further documentation of them is warranted. Though no archaeological testing was conducted at this site, the evidence of 20th century rebuilding over the site of the original 19th century facilities suggests that any archaeological value of the site has been impacted and no archaeological work is recommended at the Big Four site.

The Cleveland, Cincinnati, Chicago, and St. Louis Railroad (Big Four) is now largely controlled by Conrail (Consolidated Rail Corporation), the federally chartered corporation established in 1974 to operate financially troubled railroads in the northeast and midwestern United States. Conrail now controls the former Big Four property in East St. Louis.

#### PARCEL 10

This tract is located south of the Big Four depot between Jarrot Street and Pratt Street (Figure 3b). The emergence of the Cairo Shortline in the midst of the heated battle between the state policy and liberal policy railroad supporters has been described in previous railroad descriptions. The Cairo Shortline, originally chartered by Belleville financiers as the Belleville and Illinoistown Railroad in 1854 extended from Belleville through Illinoistown to Wood River, where it connected with the Terre Haute and Alton Railroad (C,C,C,& St.L, or Big Four, Railroad). In 1862 the Terre Haute and Alton Railroad was reorganized as the St. Louis, Alton, and Terre Haute Railroad and the Belleville and Illinoistown became known as the Cairo Shortline, which operated as a lessee of the St.L,A,& TH Railroad (Cole 1922:44-46). By 1869 the Cairo Shortline, officially the Belleville, Southern Illinois, and DuQuoin Railroad, had completed a connection to southern Illinois where it combined with the St.L,A,& TH Railroad and the Illinois Central Railroad to form a route from Chicago to St. Louis to Cairo (Brownson 1915:69).



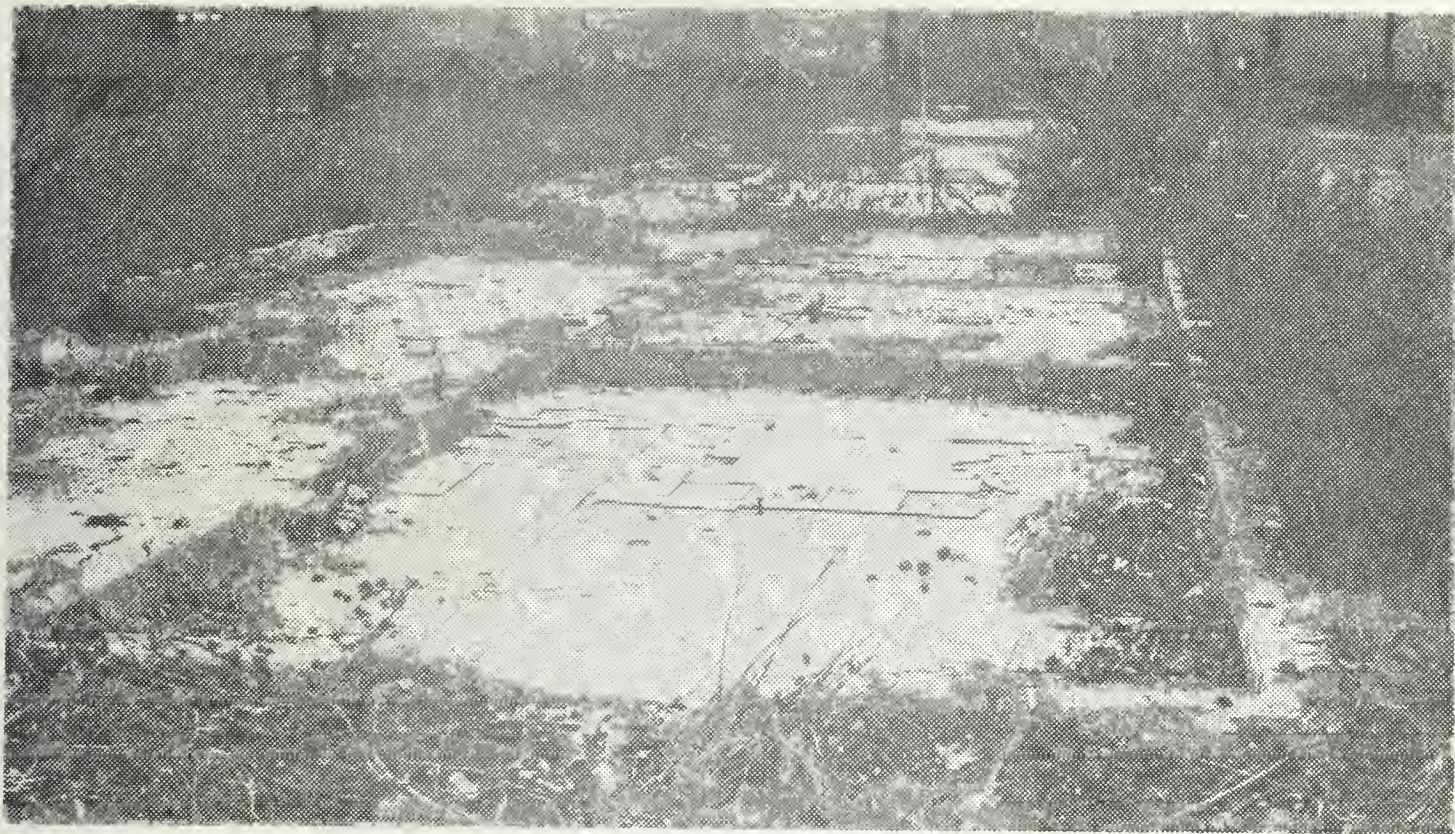


PLATE 50. A. Big Four Roundhouse, Office Remains, 1980.



PLATE 50. B. Big Four Roundhouse, Turntable Pit, 1980.





PLATE 51. A. Big Four Coach Yards, Drop Pit, 1980.



PLATE 51. B. Illinois Central Freight House in 1922, Looking Southeast.  
Courtesy of the Missouri Historical Society.



The 1874 map of East St. Louis (Figure 13) shows the Cairo Shortline railroad yards on the island. There are neither freighthouse nor roundhouse facilities for this railroad shown on the map, and they were undoubtedly sharing the facilities of the adjacent St. Louis, Alton, and Terre Haute Railroad. The passenger traffic would have gone to the relay station and grain to the elevators. Possibly, then, the Cairo Shortline terminal was a coal yard. The Cairo Shortline did carry coal from the Illinois bluff area and the connection to the Wiggins Ferry (Figure 13) might conceivably have served in this transport. The original island station, destroyed by the tornado of 1871 (Kirschten 1965:64, 65), was apparently not rebuilt before 1874.

By 1881 the facilities of the Cairo Shortline, by then called the St. Louis and Cairo Shortline, appear to have been little changed from the 1874 configuration (Figure 9). The railyard and the grain elevator connection were still present, though the ferry connection spur had been removed. By this time the connecting railroad (TRRA) had modified the island railroad connections to more efficiently transfer railroads via the Eads Bridge.

In 1896 the Cairo Shortline Railroad was absorbed by the Illinois Central Railroad. The Illinois Central Railroad was organized between 1851 and 1857 to provide an internal means of transportation for Illinois between Chicago and Cairo. The middle of the state, the fertile prairie counties, had no connection to these port cities on the Mississippi River and Lake Michigan, and an internal transportation system was believed to be a prerequisite to agricultural development of this part of the state. By 1870 the results of this railroad venture were graphic. The Illinois interior had developed into one of the major agricultural producers of the country and an essential factor in the economic organization of the country. The Illinois Central Railroad developed strong north to south routes to Chicago and St. Louis, but had not made an effort to obtain connections with the east. So, throughout the latter part of the 19th century, it was dependent on Chicago for eastern traffic and connections with the major east-west trunk lines (Brownson 1915:10-15, 66-70, 157-163). The acquisition of the Cairo Shortline, already allied closely with the IC, was a move to extend and consolidate the tendrils of this southern originating-northern bound commerce.

The Illinois Central control included use of the Cairo Shortline freight depot and the Illinoistown Roundhouse and shops, which had been leased by the Indianapolis and St. Louis Railroad and was owned by the St. Louis, Alton, and Terre Haute Railroad. By 1909 the Illinois Central freight facilities included a 32 by 360 foot freighthouse and a 32 by 720 foot inbound/outbound complex (Figure 7). A 1919 Terminal Railroad valuation map shows these freight-houses and yards. The inbound freighthouse, the 360 foot long structure, was a one-story frame, and the 720 foot-long outbound house and office were two-story brick buildings.

A 1922 photograph of the Illinois Central facilities shows the brick outbound house (Plate 51b). By this time, the outbound house had been extended to a length of 1008.8 feet. The inbound freighthouse (visible behind the office in Plate 51b) had been rebuilt and was now 50.6 feet wide and 576 feet long (St. Louis Chamber of Commerce 1922: Appendix D). The 1922 photograph of the complex shows a set of two 2-story brick structures with a loading platform and tracks in between (Plate 51b). The roofed loading platform and the tracks were shielded from Front Street by a vertical plank fence. The outbound freighthouse, which shows most clearly in the photo, consisted of a two-story section that was 2 bays wide by 27 bays long, and a one-story section that had an indeterminate number of bays (this portion of the building was, unfortunately, cut off by the left edge of the photograph). The two-story portion of the structure had a low wood-trussed, hipped roof and a concrete foundation. A brick chimney, indicating the presence of a boiler room, was located down  $\frac{2}{3}$  the length of the two-story structure. An oriel at the northwest corner of the structure allowed observation of the yard. A 1935 Illinois Central valuation map indicates that this construction was done in 1918. This valuation map also indicates that a 12 foot wide, 1044 foot long platform separated the five railroad tracks between the two freight houses. In addition, two granite block paved driveways were located north of the outbound freighthouse separated by railroad tracks, and probably functioned in the quick loading of outbound cargo that did not require handling within the freighthouse. The freighthouse complex remained unchanged through the first half of the 20th century.

A 1953 Illinois Central valuation map and a 1955 Sanborn Insurance map show the same buildings and track configurations described for 1922. However, a 1959 aerial photograph shows that the rear  $\frac{1}{3}$  of the outbound freighthouse had been removed. The freighthouse facility remained unchanged from 1959 up to 1975, but by 1978 the entire freighthouse complex, including the tracks, were removed leaving only the foundations.

As mentioned previously, the Illinois Central Railroad came into possession of the Illinoistown Roundhouse from the St. Louis, Alton, and Terre Haute Railroad probably at about the same time that the Cairo Shortline Railroad was leased (1896). The roundhouse and shops were built sometime between 1863 and 1874, after Cahokia Creek was diverted to the west, making its location available for filling and construction (Smith and Lange 1980:63). The 1874 map (Figure 13) illustrates a 100-degree roundhouse and turntable facing west, and a rectangular building connected to the west side of the roundhouse. The turntable access was from the west. By 1881 two long rectangular buildings had been added to the facility southwest of Piggott Avenue (Figure 9).

It is not known if the Illinoistown Roundhouse sustained damage from the 1896 tornado. The center of the destruction was further north. Plate 4b, showing the tornado path, places the area of destruction north of Trendley Avenue, so it is possible that this roundhouse escaped at least severe damage. A 1910 Sanborn Insurance map shows the Illinoistown Roundhouse in some detail (Figure 36). The 100-degree roundhouse facility appears to have been unchanged from the 1874 version. The insurance map shows that the turntable was 60 feet in diameter, and the rail access had been changed to the south side from the west side. The roundhouse had eight stalls 27 feet long, and the rectangular addition to the north side of the house was identified as a combination tool



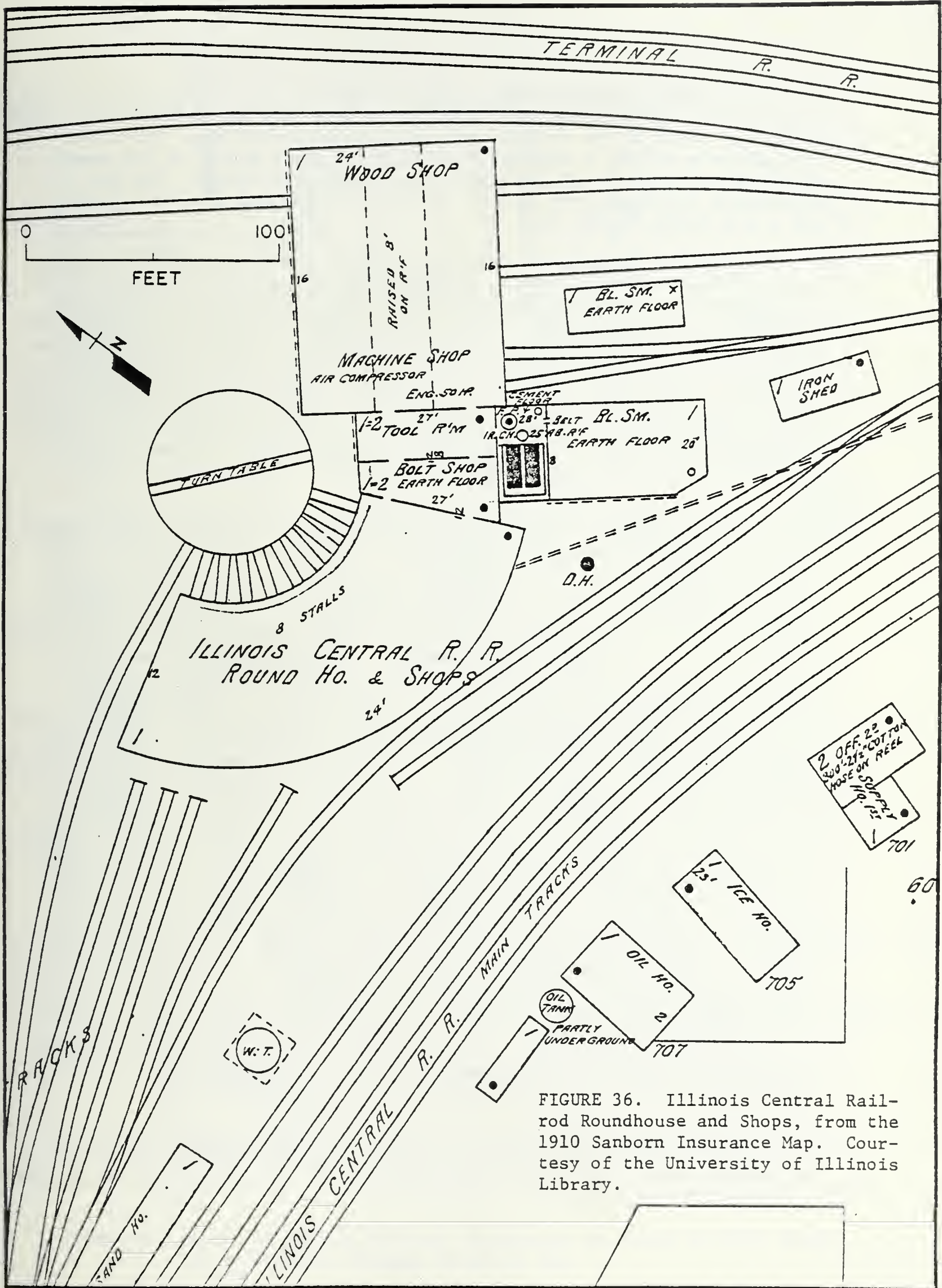


FIGURE 36. Illinois Central Railroad Roundhouse and Shops, from the 1910 Sanborn Insurance Map. Courtesy of the University of Illinois Library.

room, bolt shop, blacksmith shop, and boiler house. An addition to the north-west side of this building was a combination wood shop and machine shop. Other additional shops in the facility were another blacksmith shop, iron shed, yard master's office, a combination office and supply house, an ice house, an oil house, water tower, and other miscellaneous buildings. The two rectangular buildings from the 1881 view were identified as a tool house and a sand house (Figure 36).

By 1911 the Illinoistown Roundhouse complex had undergone vast changes. The old roundhouse and turntable were replaced with a new set located at the north end of the facility. A 1915 Illinois Central Railroad valuation map illustrates the new facility (Figure 37). The new 140-degree, 16-stall roundhouse with an 85-foot diameter turntable faced east. The old roundhouse and machine shop were used for years together as a large machine shop in the new facility. A later 1915 valuation map indicates that the first roundhouse had been classified as a "wreck". Sometime later between 1915 and 1928 the roundhouse was demolished leaving the machine shop as the only remaining structure from the original plan. Other structures in the complex included a large repair shop, storage house, power house, and many other shops and houses.

Two things are evident in the new facilities as opposed to the old Illinoistown Roundhouse. First, the number and kinds of shops in the complex and the increased size of the roundhouse indicate a new and important role played by the East St. Louis terminal than previously. The large repair shop, the craft shop, and other services indicate major repair and overhaul responsibility, rather than mere routine maintenance. The second thing that is noticeable in the new complex, though not necessarily unique to an operation of this size, is the internal arrangement of the buildings and tracks for the most efficient movement of locomotives through the facility. Note the direct access along the east side of the complex for routine fueling and maintenance (Figure 37). The tracks ran by the coaling station and water tank (off the map) before entering the main complex. The first stop was probably at the cinder pit to dump waste and then to enter the roundhouse via the turntable to be oiled, lubricated, and checked out before leaving the complex. Six of the engine stalls in the house were equipped with drop pits for removing and servicing the wheel carriage (the drop pits are visible on aerial photos of the foundation after demolition of the complex). After roundhouse servicing, the engines exited the roundhouse through the turntable or, if more repairs were needed, they exited through the west side of the roundhouse and entered the machine shop. From the machine shop, engines could follow the track around the west side of the yards and reach a mainline access track at the south end. For more intensive repairs, overhauls, and periodic breakdown of engines to check parts for stress, the engine may have bypassed the roundhouse and entered the repair shop/blacksmith shop/crafts shop area. This area, which could tie up locomotives for a comparatively long period of time, was so designed and located that it did not hamper the efficient operation of the roundhouse. In general, the design of the Illinois Central Railroad Roundhouse and shops was analogous to an industrial assembly line where activities are specialized and aligned along an ordered sequence.

Some changes in the roundhouse complex are visible on the 1959 aerial photos. The repair shop/blacksmith shop/crafts shops had been removed and a new rectangular structure was located just south of the turntable and adjacent



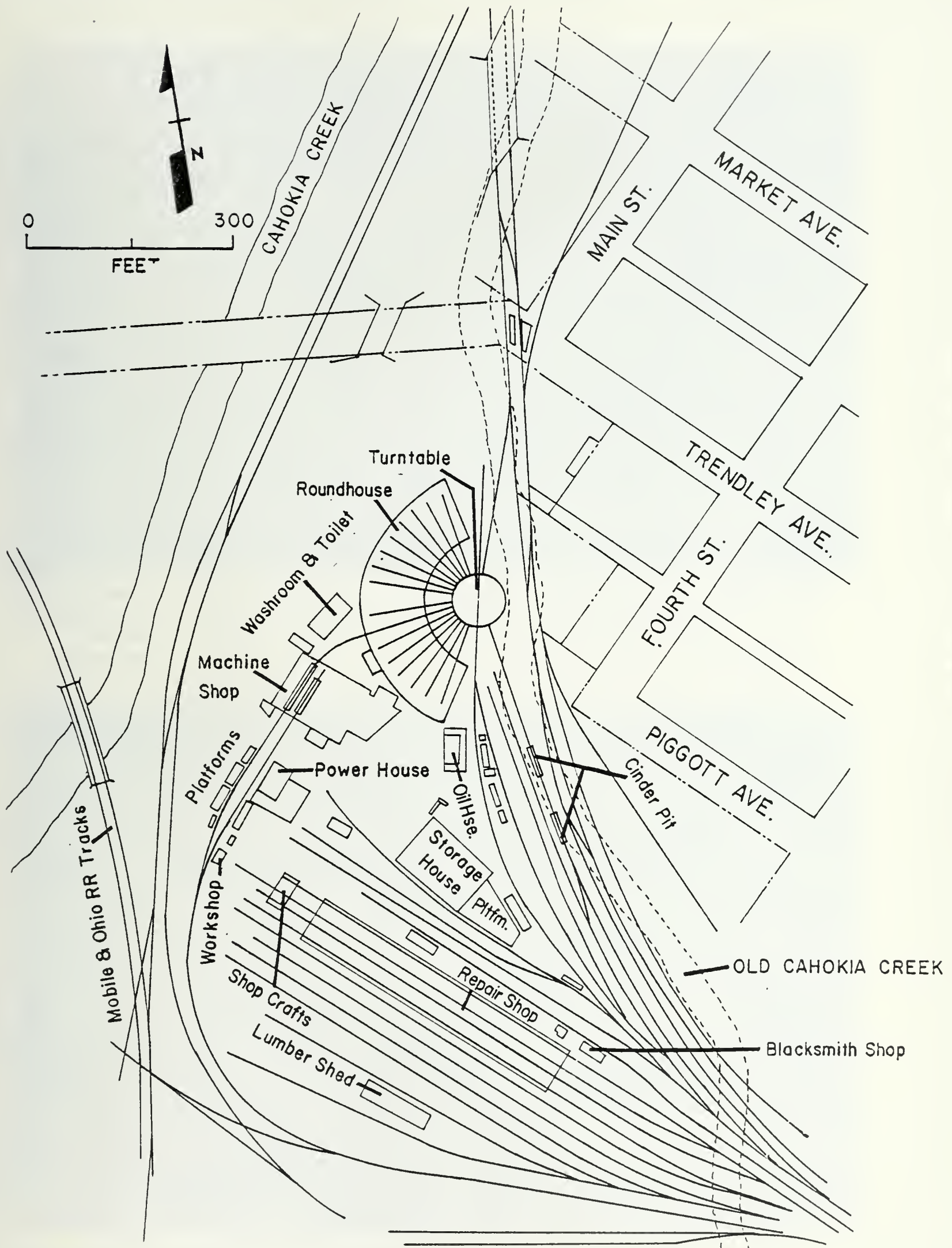


FIGURE 37. Illinois Central Railroad Roundhouse and Shops in 1915, Based on an Illinois Central Valuation Map.

to the roundhouse. By 1975 the entire facility had been demolished, the turntable pit filled in, and yard tracks removed. The foundation remains of the roundhouse (Plate 52), the power house and oil house (Plate 53), and the storage house and turntable pit walls (Plate 54) are still visible.

Close examination of the 1975 aerial photograph reveals a most singular anomaly at the Illinois Central Roundhouse, visible only on aerial photographs taken after demolition (Plate 55). Extending through the northeast corner of the turntable is a dark stain, approximately 50 feet wide, that is the original pre-1863 bed of Cahokia Creek. By discerning subtle changes in vegetation, the old creekbed can be traced through the turntable pit, and across the existing ICG tracks, which it parallels for approximately 450 feet before bending southwest again and being lost at the southeast end of the roundhouse facility. The location of the old creekbed shown on Figure 37, the Illinois Central valuation map, is inaccurate. This bit of information is of more than passing interest when certain details of the construction of the turntable pit are examined. Plate 54b of the eastern arc of the turntable pit wall shows a fairly primitive, notched timber construction wall out of keeping with the concrete and brick construction of the remainder of the facility. In fact the western arc of the pit wall was constructed of concrete (Plate 52b), which was standard practice for turntable pit construction beginning at least after the early 1890s (Berg 1893:166-175). Based on these two pieces of the puzzle, it is possible to conjecture that the eastern half of the turntable pit slumped into the old Cahokia Creek bed necessitating the jury-rigged wooden turntable wall as a stopgap measure. Though archaeological investigations did not explore this aspect of the roundhouse facility, it would be expected that such investigation would reveal a breakpoint between the wood and the concrete pit wall at about the location of the creekbank. Since the turntable was not repaired, the accident with the pit probably occurred after the decision had been made to phase out or downgrade the facilities. It also seems probable that the decision to construct the turntable pit in that location in the first place was based on faulty information concerning the location of the old creekbed, such as is exhibited by the valuation map of 1915 (Figure 37). The turntable pit is probably the one railroad structure that bears the most weight per unit of mass and is the one critical link in the railroad roundhouse assembly line that can bring almost the entire operation to a halt when it disfunctions.

#### Archaeological Investigations at the Illinoistown Roundhouse

Archaeological testing was conducted at the Illinois Central Gulf Roundhouse complex to determine whether there are intact remains of the original 19th century roundhouse complex. Specifically, the testing was aimed at evaluating the preservation of the early roundhouse and turntable that was abandoned around 1911 when the last roundhouse facility was constructed.

Field inspection of the site disclosed that the first roundhouse had been covered with fill and used as a parking lot. In addition, concrete ramps were constructed between the machine shop, the new roundhouse, and the storage house. This area of the complex, as well as the location of the turntable (between the new power house and the machine shop, Figure 37), appears to have



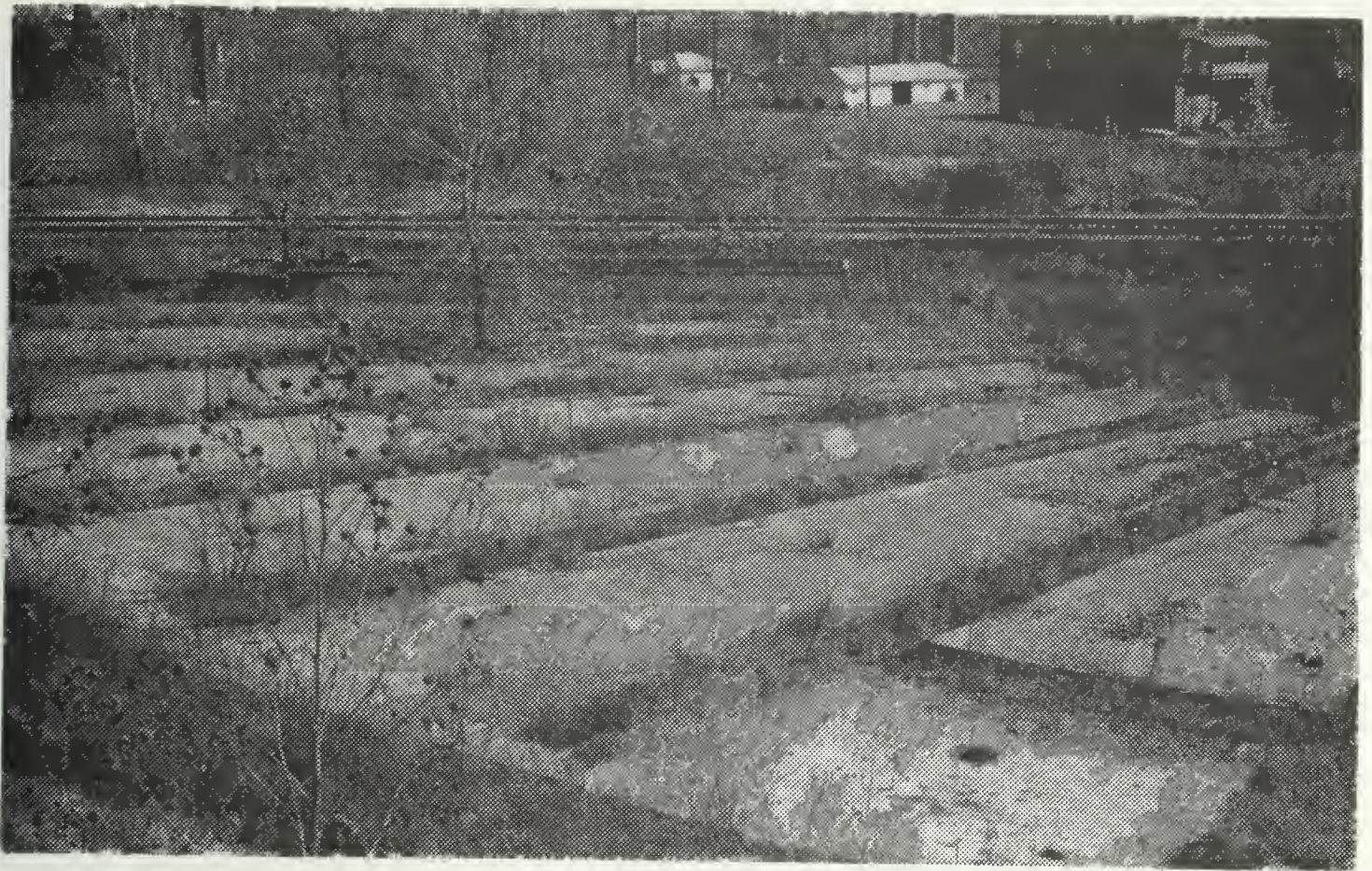


PLATE 52. A. Illinoistown Roundhouse in 1980, Looking Northeast.

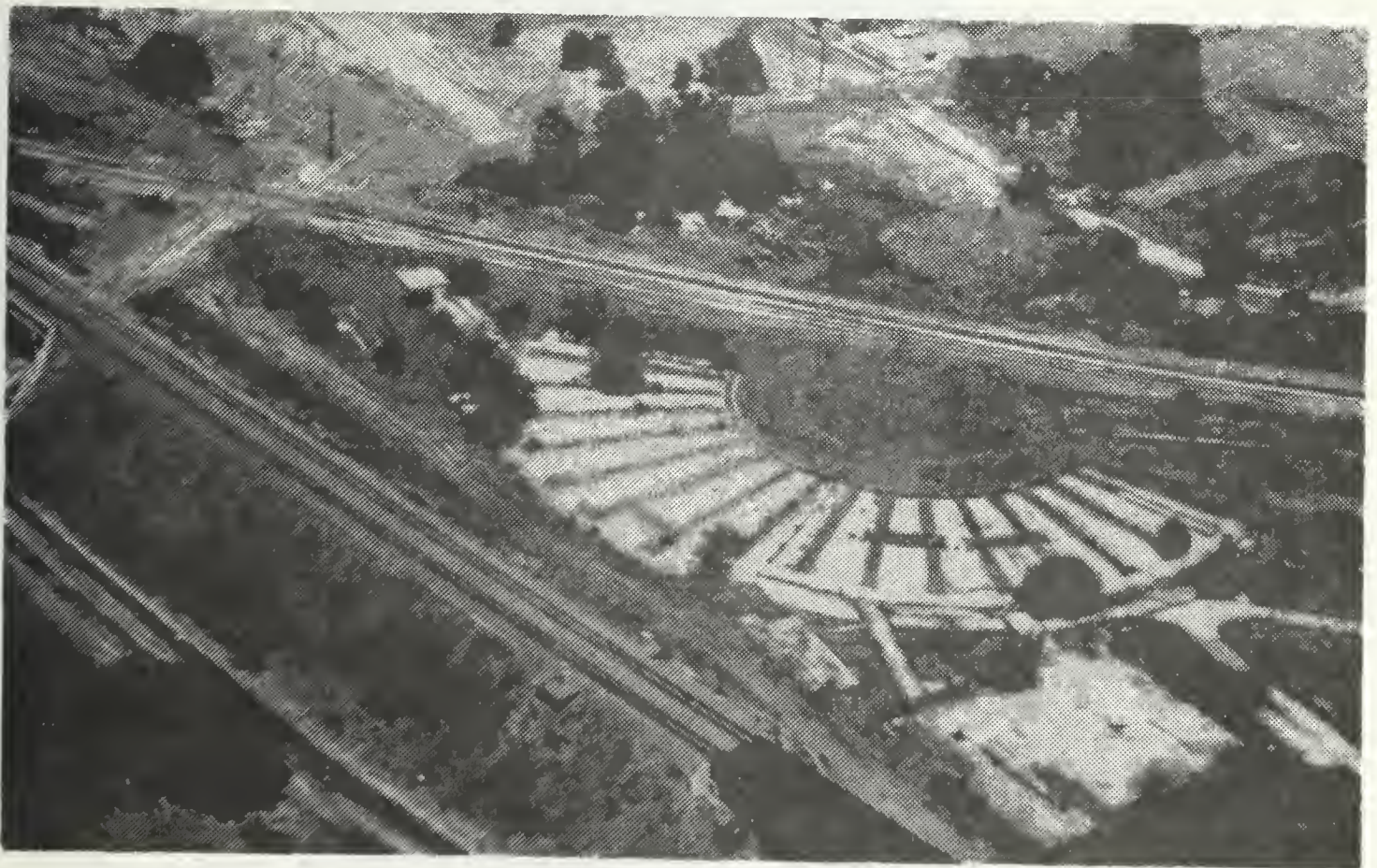


PLATE 52. B. Illinoistown Roundhouse, Aerial View to the Northeast, 1980.



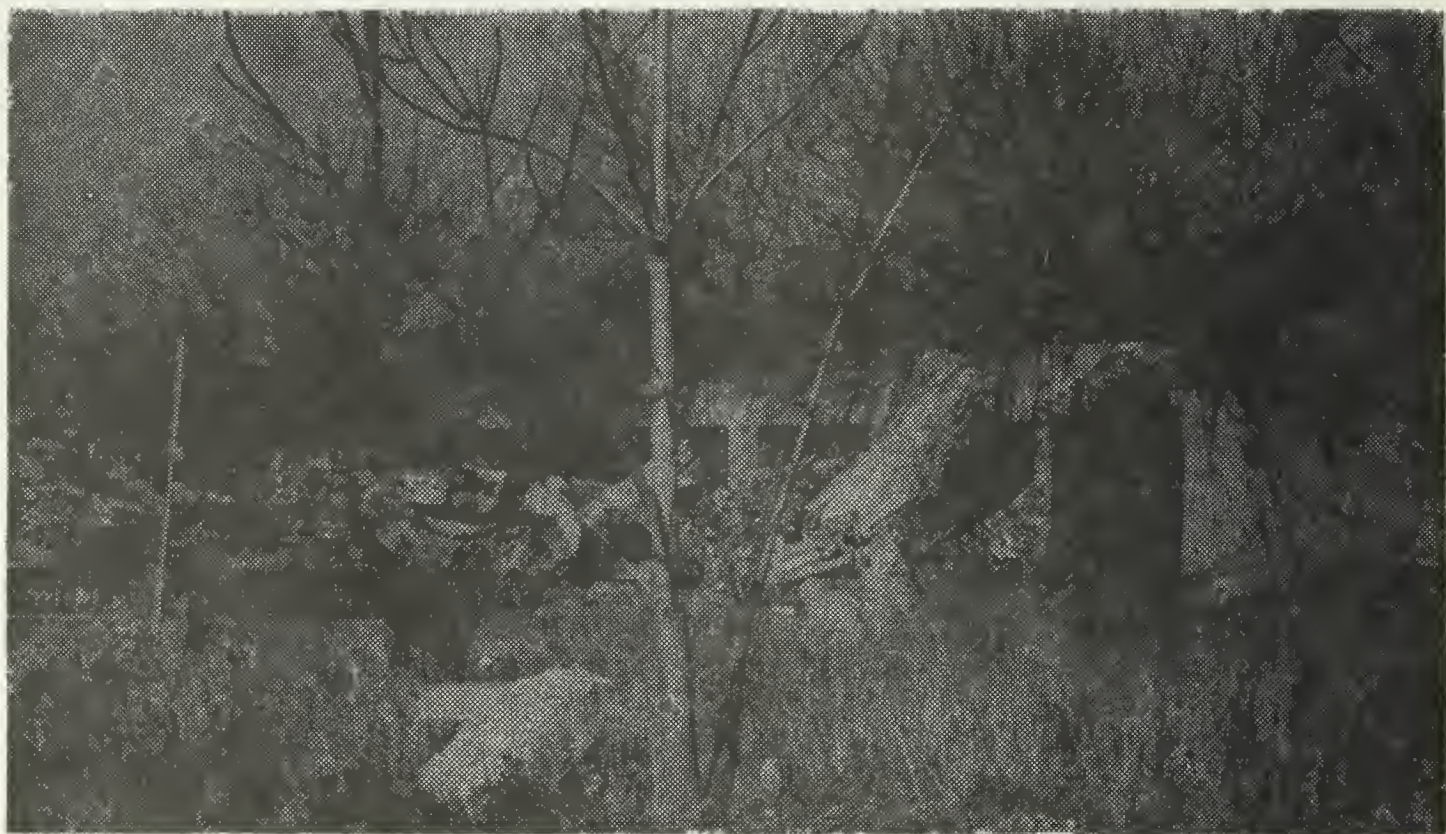


PLATE 53. A. Illinoistown Roundhouse, Remains of the Power Plant, 1980.



PLATE 53. B. Illinoistown Roundhouse, Remains of the Oil House, 1980.





PLATE 54. A. Illinoistown Roundhouse, Remains of the Storage House, 1980.



PLATE 54. B. Illinoistown Roundhouse, Wooden Turntable Pit Wall, 1980.





PLATE 55. 1975 Aerial Photograph of the Illinoistown Roundhouse Site,  
Showing the Pre-1863 Cahokia Creek Outline.



escaped later use by the Illinois Central and may, for that reason, still have intact foundation remains beneath the fill.

The portion of the complex chosen for testing was located just east of the storage house platform. This area is near the sandhouse illustrated on the 1910 Sanborn Insurance map (Figure 36), and is believed to have been the section of the original facility that was utilized for routine supplying of sand, water, and the dumping of ash and cinders.

A backhoe trench was excavated to a depth of 4 feet below surface, with an extension of the trench excavated to a depth of 12 feet below surface. The trenching located what is believed to be a cinder/ash pit and associated structure (Plate 56a). The ashpit consists of stone and concrete foundations 1.3 feet wide and 4 feet deep, and is the standard gauge of 4 feet 8-1/2 inches wide. The tracks were fastened with screw bolts and clips to an iron plate that was bolted to the foundation (Plate 56a). The exterior of the ashpit wall is faced with concrete. The ashpit extends a length of at least 50 feet, uncommonly long for an ashpit, and therefore was probably used for under-carriage inspection, oiling, lubrication, or minor repairs. Attached to the east wall of the cinder pit is a small rectangular foundation, 6 feet long and 3 feet wide. The structure is attached two feet from the top of the foundation while the east side of the structure, which is squared off, rises to within a foot of the surface. The function of the structure could not be determined from the testing investigation or archival and map research. It presumably supported a structure associated with some activity of locomotives that were stopped to unload cinders.

The research at the Illinois Central Roundhouse documented the roundhouse facilities through archival and map investigation and looked closely at the ashpit component of this complex through archaeological investigation. Though not significant by itself, the ashpit uncovered at the site is an important part of the roundhouse facility for a complete understanding of how the roundhouse and shops were organized. The old Illinoistown Roundhouse/Illinois Central Roundhouse and shops is a significant cultural resource in that it encompasses within one site a record of railroad structures ranging from the 1860s to the 1950s. The railroad structures, rather than being neatly divided between the first roundhouse facility and the second, post-1911 complex, represent a complicated industrial site that continuously grew and evolved in response to both technological innovations within the railroad industry and changing needs of the particular railroads that have utilized the site. Structures associated with the pre-1900 complex were often incorporated in later plans or modified and reused for other purposes after the original design of the building had become obsolete. New buildings were constructed and tracks were rearranged throughout the use of the site. It seems clear that the buildings and structures at the Illinoistown site can best be understood within a framework that includes an "assembly-line" approach to the internal organization of the components of the facility.

The remains of the Illinoistown Roundhouse are significant from a "public awareness" point of view, in that they represent an excellent example of in situ archaeological remains of a type of site (i.e., an early 20th century industrial site) that is generally not afforded much public interest. For this reason, this site (S-661) appears to meet the criteria for inclusion in the National Register of Historic Places. It is recommended that the site



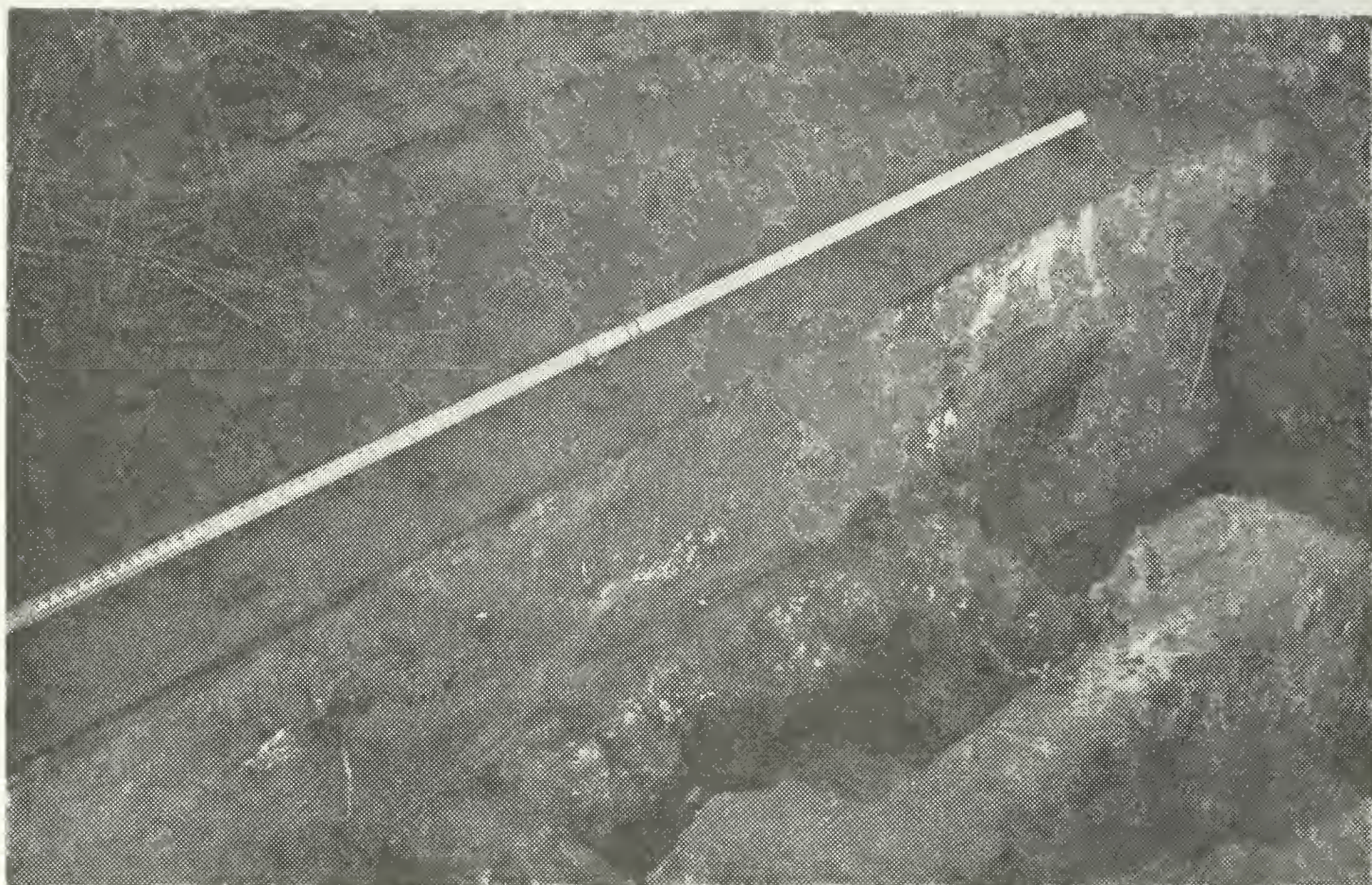


PLATE 56. A. Illinoistown Roundhouse Excavations, Remains of Ash/Cinder Pit, 1980.

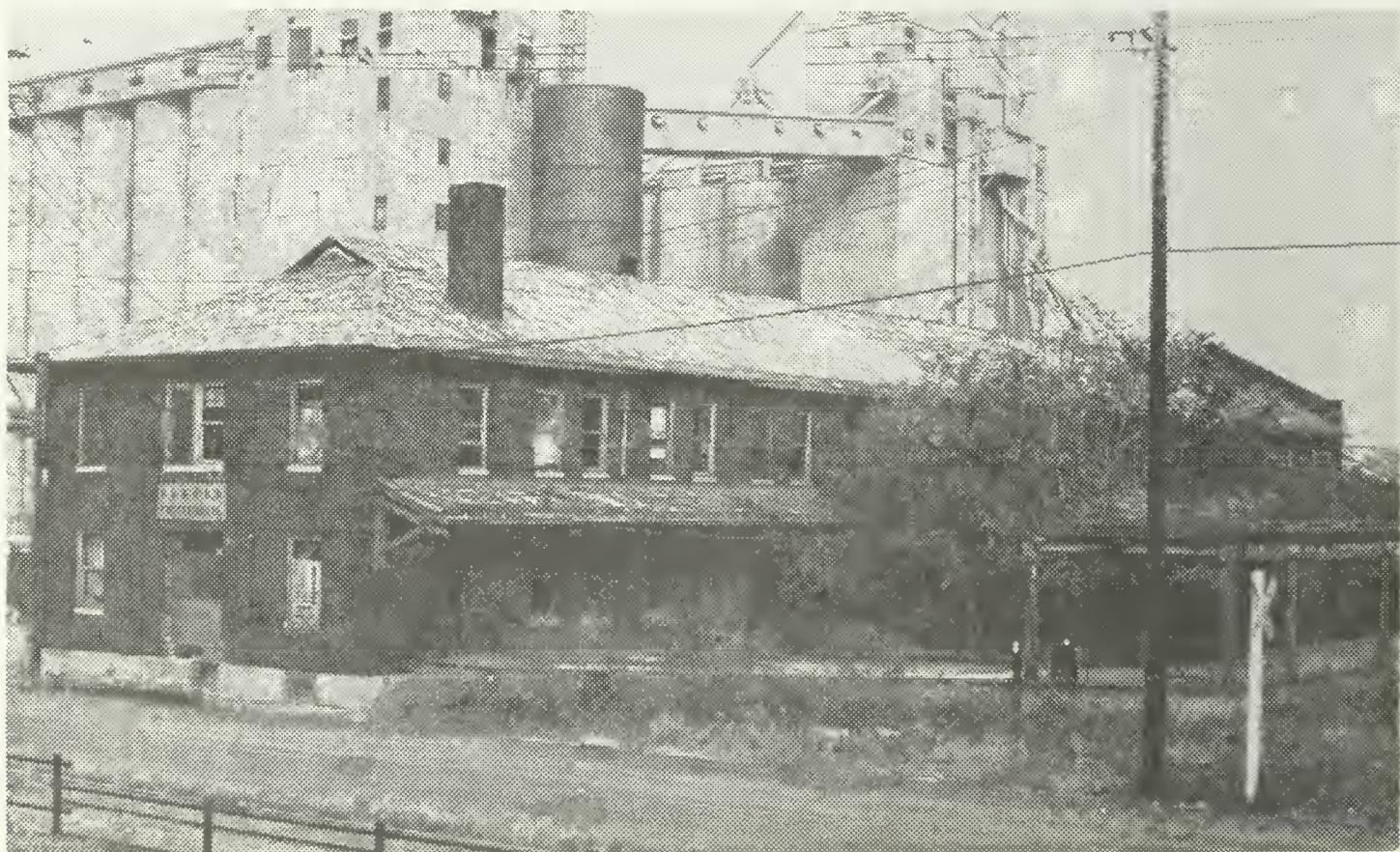


PLATE 56. B. Gulf, Mobile, and Ohio Freight Office in 1980, Looking Northeast.



be included within a masterplan for public education and historical interpretation of the East St. Louis railroad history. In addition, further study and documentation is recommended to examine the origin and design of the facility, and the ways that the complex has been used and modified over the years, including the importance and role of the site for each of the railroads that have leased, owned, or in any other fashion used the roundhouse facility since its construction. Another important goal of future study should be a better understanding of the importance of the roundhouse complex to the local work force that was employed in the facility. The railroads played an extremely important role in the growth and development of the East St. Louis area, and this site provides the opportunity to acquire and transmit knowledge of this aspect of East St. Louis' industrial history to the general public. A plan for this future work on the Illinoistown Roundhouse site will be included in the summary and recommendations.

#### PARCEL 11

The tract of land encompassed by Parcel 11 is located between Church Street and Trendley Avenue (Figure 3b). This parcel was unoccupied for many years after the early railroads moved to the island from the mainland. It was not until the early 1870s that the Trendley Avenue dike was constructed at the south end of this parcel after the Cairo and St. Louis Railroad acquired the tract north of the dike.

The Cairo and St. Louis Railroad was organized in 1871 and began running trains between these two cities in 1873. This was during the active period of railroad expansion in Illinois when Cairo, Illinois, was being groomed as the coming railroad center. This principle was founded in the period when the north to south axis of transportation was established along water routes that were the dominant means of commerce between New Orleans, St. Louis, and the Great Lakes area. The establishment of the north to south railroad lines was in keeping with these original lines of transportation, and partly stemmed from the Illinois policy of promoting the favorite state cities of Chicago, Alton, and Cairo.

The Illinois Central Railroad connecting Chicago and Cairo, Illinois, was the first of these internal railroads expected to draw a lot of commerce from the Great Lakes and Illinois prairie to Cairo, where the steamboat or barge transfer to a railroad across the Mississippi River was expected to provide the next link in this southerly directed network. Oddly enough the railroads, like the Illinois Central, the Cairo Shortline, and the Cairo and St. Louis Railroad, served to draw commerce from the South north to Chicago where connections to the Northeast were well established (Brownson 1915:1-16, 23-30, 157-162; Bogart and Thompson 1922:318-319). However, when the Cairo and St. Louis Railroad was constructed in 1871, it was still believed that Cairo would be the next great railroad center.

The terminal facilities of the Cairo and St. Louis Railroad in 1874 were modest. Pictured on Figure 13 are railroad tracks down the center of Second Street, to the East St. Louis elevator on the riverbank, and to a small D-shaped engine house on Fourth Street. Note that the illustration indicates

that the Cairo and St. Louis was a narrow gauge railroad (Figure 13). The narrow gauge roads (3 feet wide tracks as opposed to the standard gauge of 4 feet 8-1/2 inches) were built because they were cheaper and more economical to maintain, and could be extended into areas where the more expensive standard gauge roads would be unfeasible.

Perhaps one of the largest narrow gauge trunk lines in the 19th century involved two of East St. Louis' railroads, the Cairo and St. Louis Railroad and the Toledo, Cincinnati, and St. Louis Railroad. The idea of a great narrow gauge trunk line from the Midwest to the Atlantic seaboard had been debated for years (Bogart and Thompson 1922:318-319). In the late 1870s the catalyst for a narrow gauge trunk line came from the politicians and planters of the cotton districts of Arkansas and Texas, who wanted a competing railroad to stem the control of Jay Gould's Wabash, St. Louis, and Pacific Railroad monopoly on traffic moving east from their states. The challenge came from a powerful combine headed by Louis Paramore of St. Louis and Logan Roots of Little Rock, Arkansas, who chartered the Texas and St. Louis Railway, which would extend from the Rio Grande at Laredo, Texas, to the confluence of the Ohio and Mississippi Rivers. From there, it would use the Illinois Central transfer boats and the Cairo and St. Louis Railroad to reach East St. Louis, where it would connect with the Toledo, Cincinnati, and St. Louis Railroad to northern Ohio and Cincinnati (Rehor 1965:134). The grand narrow gauge scheme remained alive for the next few years despite reorganization of the Cairo and St. Louis in 1882 as the St. Louis and Cairo Railroad, and financial troubles and receivership of the Toledo, Cincinnati, and St. Louis Railroad. By 1886 the bondholders of the T,C,& St.L had lost patience with the operators of that railroad and formal reorganization was effected that included widening the gauge. Between 1885 and 1886 most of the other lines that made up the Grand Narrow Gauge were reorganized and their gauges widened. The newly reorganized St. Louis and Cairo Railroad lasted only 5 years before being sold to the Mobile and Ohio Railroad. The failure of the Grand Narrow Gauge Trunk line spelled the end of the narrow gauge scheme as being outmoded and fiscally unsound (Rehor 1965:135-147).

In the reorganization of the Cairo and St. Louis Railroad after the Grand Narrow Gauge disaster, control of the railroad passed to the Mobile and Ohio Railroad, which had connections with the Illinois Central Railroad at Cairo and extended south into Alabama and Louisiana. The Mobile and Ohio Railroad, like the Illinois Central, had been chartered as a land grant railroad in 1851 to effect the construction of a trunk line from Chicago to Mobile (Brownson 1915:29, 74). However, the control of the St. Louis and Cairo Railroad by the Mobile and Ohio Railroad at the same time the Illinois Central was utilizing the Cairo Shortline between St. Louis and Cairo is perplexing in that both land grant railroads appear to have been drawing traffic from St. Louis along parallel railroads to Cairo. Possibly the Cairo Shortline and the St. Louis and Cairo Railroad were tapping different markets and so there was less overlap than might be imagined. Both roads were carrying grain and coal, while the Cairo Shortline also carried passengers (Brownson 1915:69), and the St. Louis and Cairo carried lumber.

The 1881 map shows that before reorganization, the track configuration of the Cairo and St. Louis Railroad had been changed, a freight yard constructed on the island, a larger roundhouse constructed, and three freight buildings installed: one along Trendley and two along Church Street adjacent

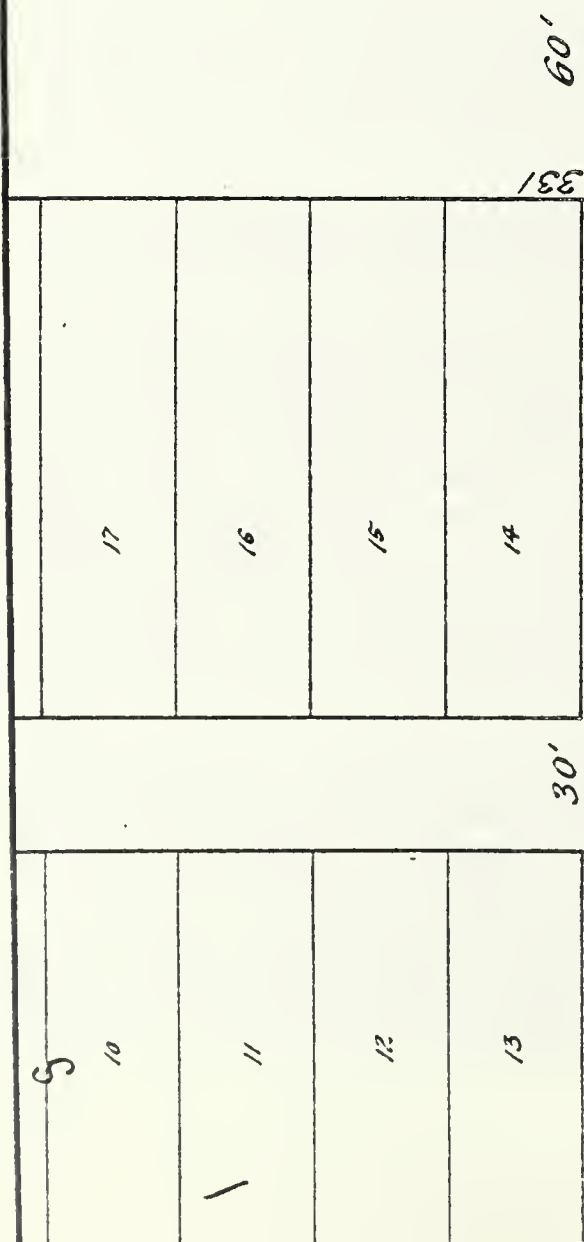



to the East St. Louis elevator approach (Figure 9). The Mobile and Ohio Railroad terminal depot on Bloody Island in 1909 included both freight and roundhouse facilities (Figure 7), but the design had changed some since 1881. The 110-degree roundhouse was similar to the one in the 1881 facility, though it may have been a rebuilt structure post-dating the 1896 tornado. The freight-house on Trendley Avenue had been extended from 250 feet to 420 feet long, and the two freight buildings along Church Street could have been constructed on the ca. 1881 house foundations, but were much longer than the original freighthouses in that location (Figure 7).

A 1910 Sanborn Insurance map shows the roundhouse in more detail. The 110-degree roundhouse actually consisted of two sections: a 55-degree section on the west side with stalls 88 feet long, and a 55-degree half on the east side with stalls 76 feet long (Figure 38). The turntable was 64 feet in diameter. Other structures in the Mobile and Ohio engine facility included an elevated water tank and an oil house. A 1915 Illinois Central Railroad valuation map indicates that within a few years, the western half of this roundhouse was demolished. However, 1928 aerial photographs show a 110-degree roundhouse identical to the 1910 version, so either the western half was rebuilt after 1915 or the 1915 IC map had old information dating to before 1910. In addition to the facilities north of Trendley, the Mobile and Ohio Railroad utilized the old St. Louis Bolt and Iron Company shop south of the Illinoistown Roundhouse (Figures 7, 9, and 13). This large square building was used as a combination engine house and shops until sometime between 1909 and 1929, when it was demolished. This building shows up on later aerial photographs and was slowly buried with fill, apparently with the foundation intact. The island roundhouse was demolished between 1932 and 1959. The new Mobile and Ohio Roundhouse and shops were constructed by 1935 within the city limits of Monsanto south of East St. Louis.

The freighthouse facilities were modified between 1909 and 1919 when a Terminal Railroad Association valuation map shows that the freighthouse along Trendley was removed and a new freighthouse and office built next to Church Avenue (Figure 8). A 1922 map shows this freighthouse unchanged from 1919. Though the Mobile and Ohio Railroad was reorganized as the Gulf, Mobile, and Ohio Railroad in 1938, the freighthouse remained unchanged up to 1953. The 1953 Terminal Railroad Association map shows this freighthouse in some detail. The house had a two-story frame front section 260 feet long, and a rear one-story freight handling section approximately 440 feet long. The front part of the freighthouse was 41 feet wide and the rear was 31.4 feet wide. The front two-story portion was divided equally between an office in the front and a depot in the rear. A concrete platform extended from the office at a diagonal to Front Street and then turned east, where it extended parallel to the freighthouse for its full length.

By 1955 the front two-story portion of the freighthouse had been demolished and replaced with a two-story brick house (Plate 56b). The rear freight handling facility had also been replaced with a one-story structure 41 feet wide (Plate 57a). The 1955 office building and freighthouse are built on concrete foundations. The front section of the office roof is a gable-on-hip, but the rear section of the roof is a stepped gable (Plate 57a). Along the south side of the office, a pent roof protects the loading docks. The office was heated by a furnace located in the southwest corner of the structure.

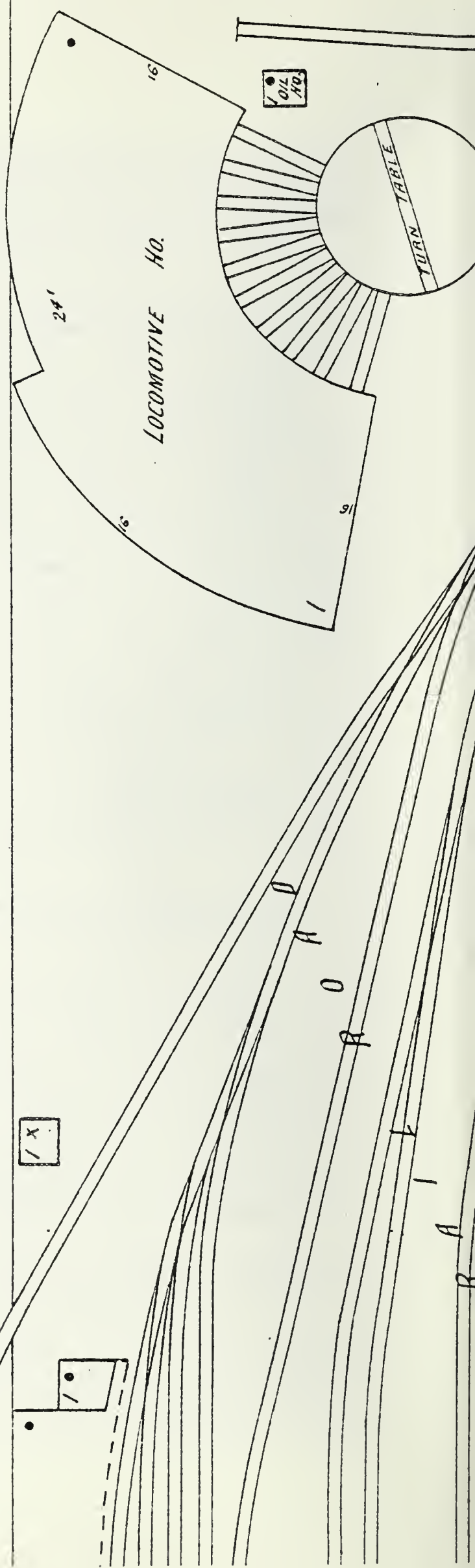


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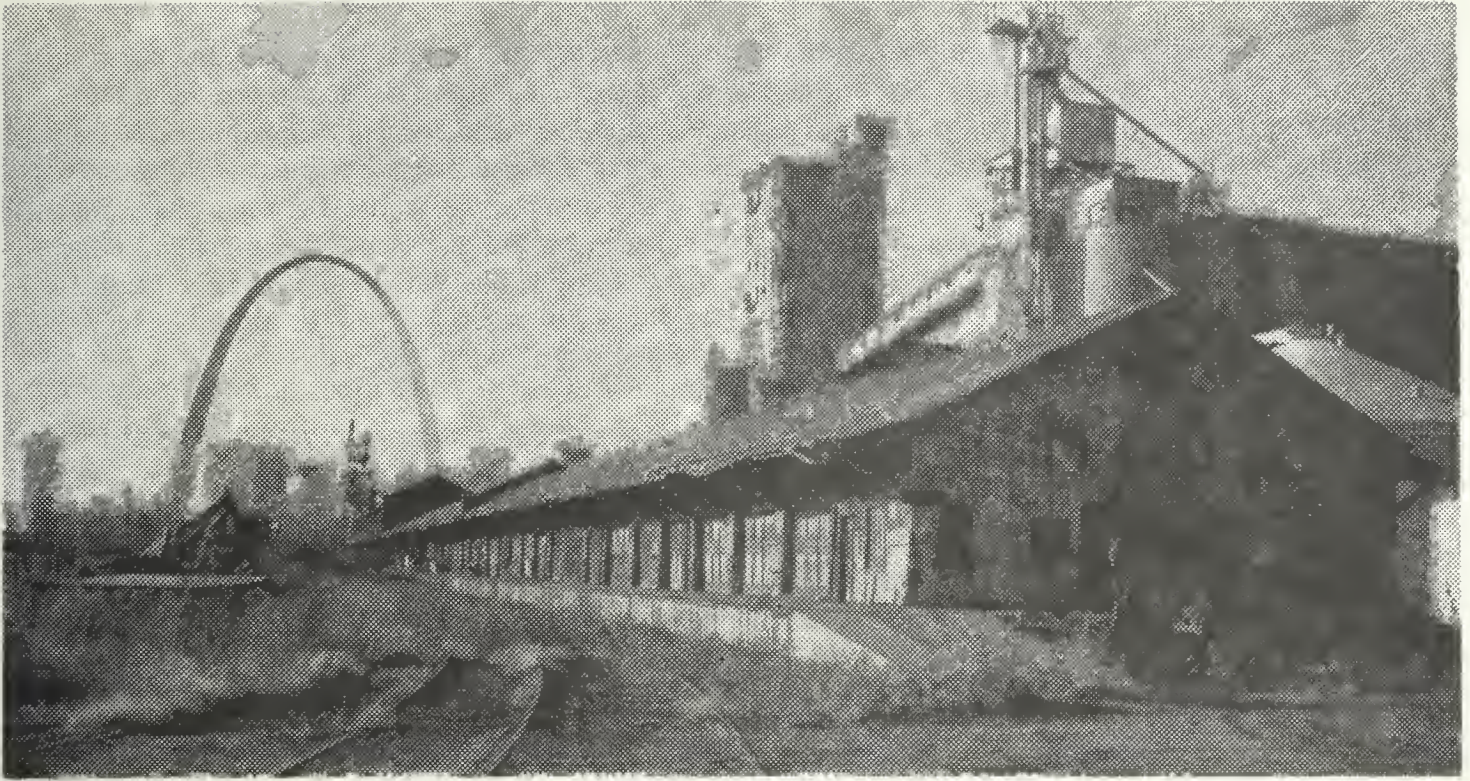


PLATE 57. A. Gulf, Mobile, and Ohio Freighthouse in 1980, Looking West.



PLATE 57. B. Aerial View of the TRRA Brooklyn Roundhouse and Shops, 1980. View is to the East.



The freighthouse is divided into 2 sections: an inbound section to the west and an outbound section to the east. This is uncommon in the project area where, in most instances, the inbound and the outbound freight-handling duties were carried out in two different structures. Possibly the amount of outbound freight was so small that it could be accommodated in one building with the concrete platform south of the freighthouse to handle the overflow. Each of the two sections has 16 bays, for a total of 32 bays. The freighthouse has a low gable roof whose overhanging eaves provide shelter for the loading docks (Plate 56b).

The G,M,& O Freighthouse is in a very poor state of preservation. Because of this and its recent age, the structure does not meet the minimum criteria for inclusion in the National Register of Historic Places. Therefore, no further work is recommended.

## PARCEL 12

Parcel 12 is located at the south end of the island at the site of the TRRA's Wiggins Ferry Roundhouse, but actually the Terminal Railroad Association and the subsidiary Wiggins Ferry Company have tracks, structures, and property all over the east side, as well as the St. Louis side of the river. However, for purposes of this summary and site description, only the Wiggins Ferry Roundhouse and the Brooklyn Roundhouse will be described in detail.

The Terminal Railroad Association is a switching and terminal railroad corporation operating on the east side and in St. Louis. In 1975 its facilities included the Eads and Merchants Bridges, freight yards, repair shops, engine terminals, 2500 acres of property, and over 300 miles of track connecting all 21 railroads operating to and from St. Louis-East St. Louis. Virtually all railroads in the area are dependent on the Terminal Railroad Association for entrance into the St. Louis rail system and for interchange of freight.

The Terminal Railroad Association is controlled by 14 "owning" railroads including the Baltimore and Ohio; Burlington Northern; Chicago and Eastern Illinois; Chicago, Rock Island, and Pacific; Cleveland, Cincinnati, Chicago, and St. Louis; Illinois Central Gulf; Louisville and Nashville; Missouri-Kansas-Texas; Missouri Pacific; Philadelphia, Baltimore, and Washington; St. Louis Southwestern; St. Louis and San Francisco; Southern; and the Norfolk and Western Railroad (Hanson 1975:12).

The Terminal Railroad Association was incorporated in 1889 as a consolidation of the Terminal Railroad of St. Louis and the Union Railway and Transit Company of St. Louis. Other subsidiaries of the TRRA included the St. Louis Bridge Company, the St. Louis Merchants Bridge Terminal Railway Company, the Terminal Realty Company, the Tunnel Railroad of St. Louis, and the Wiggins Ferry Company (Hanson 1975:12). With the control of the Wiggins Ferry Company, the TRRA has roots in the transfer business dating back through the early Wiggins operation to the Piggott ferry enterprise established in 1795.



Structures and facilities associated with the Terminal Railroad Association are varied and include roundhouse and engine shops, freightcar repair shops, yards, and bridges. The first railroad locomotive maintenance structure of the TRRA was the Wiggins Ferry Roundhouse and Repair shops (Figure 3b). Absent from the 1881 map (Figure 9), the site first appears on the 1896 bird's eye view of the tornado path through the east side (Plate 4b). It is possible that the facilities were built shortly after incorporation of the TRRA in 1889. The engine facilities pictured in Plate 4b consisted of a northwest-facing roundhouse and a long warehouse. The Wiggins Roundhouse escaped the brunt of the tornado of 1896, and was incorporated into a new design constructed by 1910 (Figure 39).

In the new design, the turntable and roundhouse from the original facility were augmented by construction at the rear of the roundhouse of a large one-story structure that housed the machine shop and general repair shops, supply room, a wood shop, and boiler shop. A smaller rectangular structure on the west corner of the house contained the paint shop and pattern shop. The six-stall, 75-degree roundhouse was serviced by a 50-foot diameter turntable. A third track extending to the west side of the roundhouse was either a washing area or a short-term standing area for locomotives. The roundhouse and shops were of wood frame construction with composition gravel roofing. A sandhouse near the yard approach; a combination sand, oil, and water facility at the end of a track spur; and a wood frame coal and wood shed were located just north of the turntable.

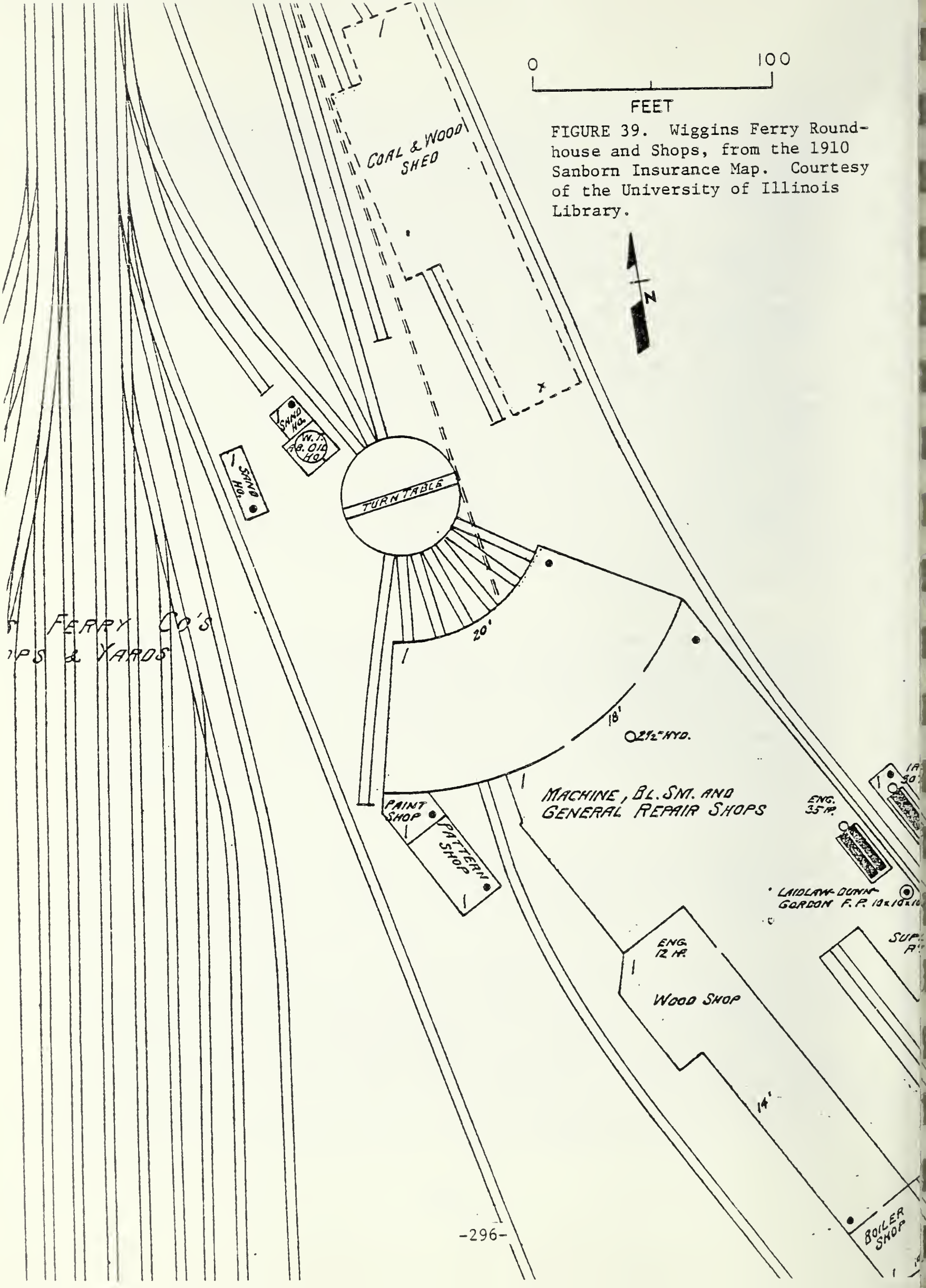
The Wiggins Ferry Roundhouse and shops was a unique engine facility in East St. Louis. With the radial arrangement of components of the facility behind the turntable, a locomotive could proceed from the roundhouse through the various stations within the facility under one roof, and then exit out the rear of the structure without having to backtrack or exit through the turntable. However, this convenience of having all the shops under one roof behind the turntable was also very risky. For instance, a breakdown of the turntable could halt operation of the entire system, and even without a failure of the turntable, the potential bottleneck caused by focusing all traffic through the turntable could hold up locomotives or cause major loss of property in the event of a fire.

The linear and compacted arrangement of the railroad structures at the Wiggins Ferry Roundhouse and shops was undoubtedly an adaptation to the constraints of the location chosen for this facility. As previously discussed in the Piggott-Wiggins ferry complex site testing description, the 19th-century ground surface of this area south of Trendley Avenue was between 396 to 406 feet MSL prior to landfilling. The ground surface after landfilling in preparation for the Terminal Railroad yards and Wiggins Ferry Roundhouse was approximately 420 feet MSL. The expense and energy required to raise the elevation of this area 14 to 25 feet must have been considerable. The compact linear arrangement of the roundhouse and shops must have been dictated by the extra costs that would have been required to raise and improve a larger area for a more open facility such as the Illinoistown Roundhouse (Figure 37).

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FIGURE 39. Wiggins Ferry Roundhouse and Shops, from the 1910 Sanborn Insurance Map. Courtesy of the University of Illinois Library.





By 1919 the Wiggins Ferry Roundhouse and shops had been abandoned in favor of a new roundhouse and shops near Brooklyn. Figure 40 depicts the old abandoned facility, and shows more detail on the interior track configuration. At some point in time, the turntable was removed and a frog and switch installed. The woodshop was also removed. The track configuration inside the structure shows that of the six tracks inside the roundhouse, one was phased out, two extended completely through the structure, and three tracks extended into the general repair shop area (Figure 40). All of the buildings were demolished prior to the 1928 aerial photographs.

When the Wiggins Ferry Roundhouse was phased out, a facility at Brooklyn became the lead maintenance and repair complex for the Terminal Railroad Association. The TRRA Roundhouse and shops are located at the southeast corner of the village of Brooklyn. This complex, which consists of five buildings plus associated track and equipment, first appears on a 1909 2-foot contour map of the entire metro-East area (Figure 7, Plate 57b), although one informant stated that he thought the complex had been built around 1901 (R. Ripper, personal communication 1980). The power plant still has relatively intact its original equipment of marble and brass that has a date of 1903 (Plate 58). Since the equipment was undoubtedly purchased and installed during construction of the power plant, it is probable that the complex was built sometime between 1903 and 1909.

The TRRA complex offers an excellent example of early 20th century railroad repair shop construction and machinery that has retained much of its structural and industrial integrity to the present day. The power plant, the two shop buildings, and the oil house are all built of brick (Figures 41, 42, and 43). The remaining portion, consisting of eight bays, of the once nearly circular roundhouse appears to be built of corrugated steel panels, although the original was probably constructed of brick. The engine shop is two stories with 15 bays. Steam engines were originally built in this structure and it is still actively used for repair (Plate 59a). Among the original equipment still being used in the repair shop are an 80-ton Niles overhead crane (Plate 59b) and the original ~~steam hammer~~. The crane was used for lifting the boiler off of the wheels. The power plant still retains its Ingersoll-Rand generator (Plate 60a) and Westinghouse direct current electrical equipment that was patented in 1899 (Plate 60b).

A series of views of the TRRA Roundhouse and shops for 1910, 1919, and 1954, as well as contemporary aerial photographs, allow for a comparative study of the growth and development of this facility since its construction. The 1910 view of the complex is based on a Sanborn Insurance map of that year (Figure 41). Pictured is a 170-degree, west-facing roundhouse with turntable; a power house; a large rectangular building housing the machine shop, repair shop, and blacksmith shop; a combination wood shop-paint shop; a combination storeroom-office; and the transfer table located southwest of the repair shop (Figure 41). Not all of the tracks were shown on the insurance map, but there would have been 16 tracks leading into 16 stalls in the roundhouse and at least 10 tracks from the transfer table to the repair-machine shop. Possibly the transfer table and the wood shop-paint shop building were constructed in 1910 since they are absent from the 1909 map.

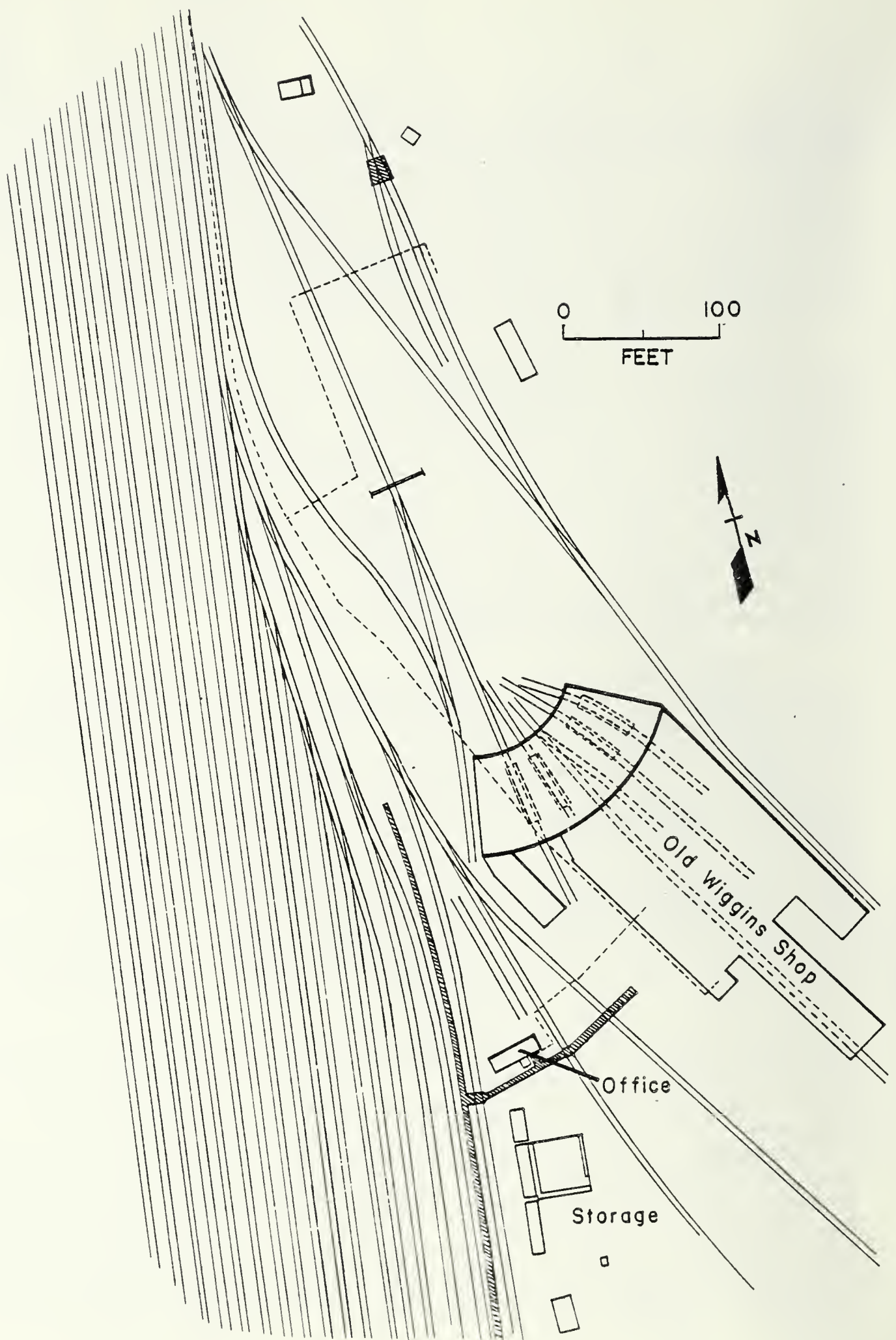


FIGURE 40. Wiggins Ferry Roundhouse and Shops in 1919, Based on a TRRA Valuation Map.



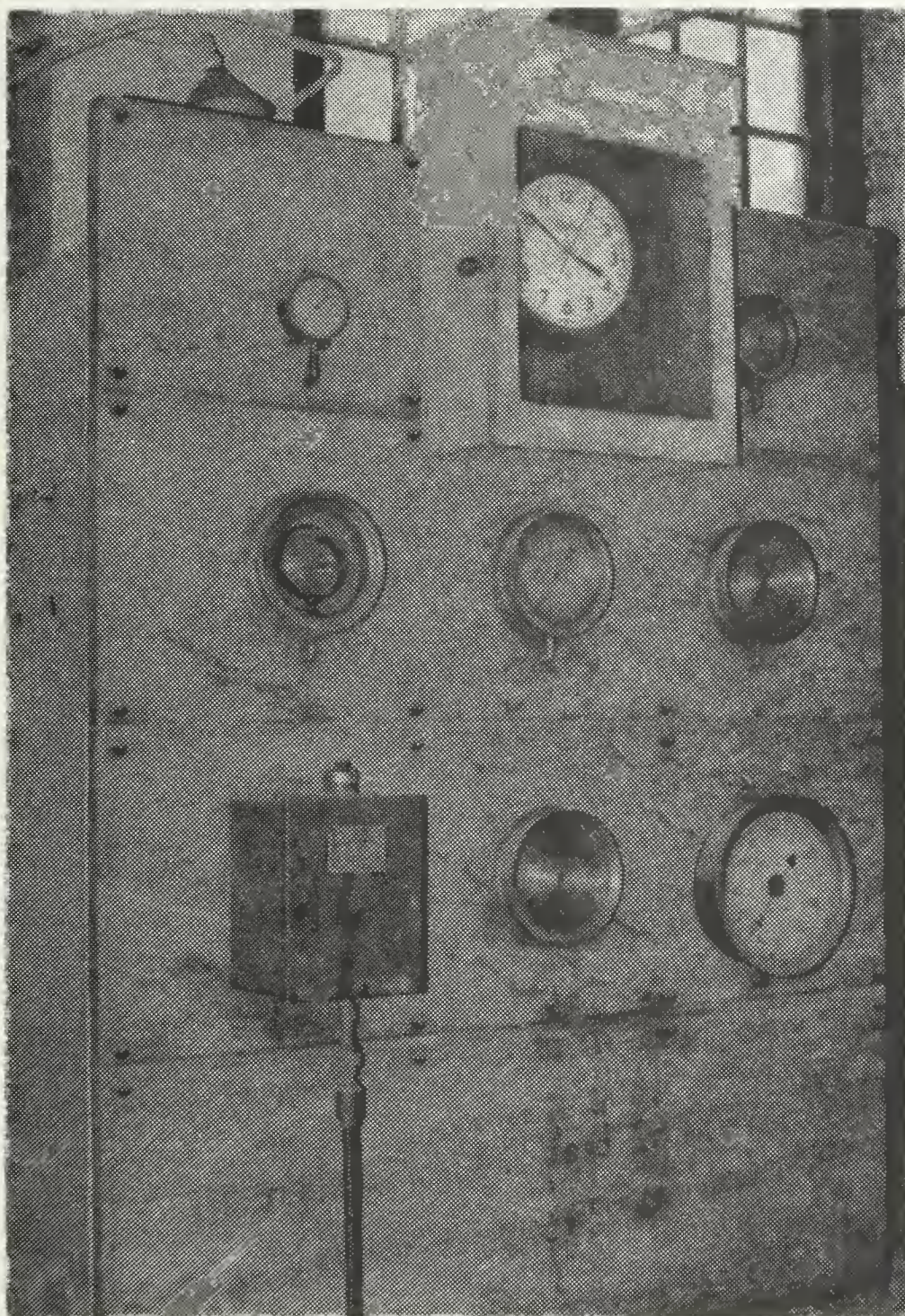


PLATE 58. TRRA Brooklyn Roundhouse and Shops, Power Plant Equipment with 1903 Date.



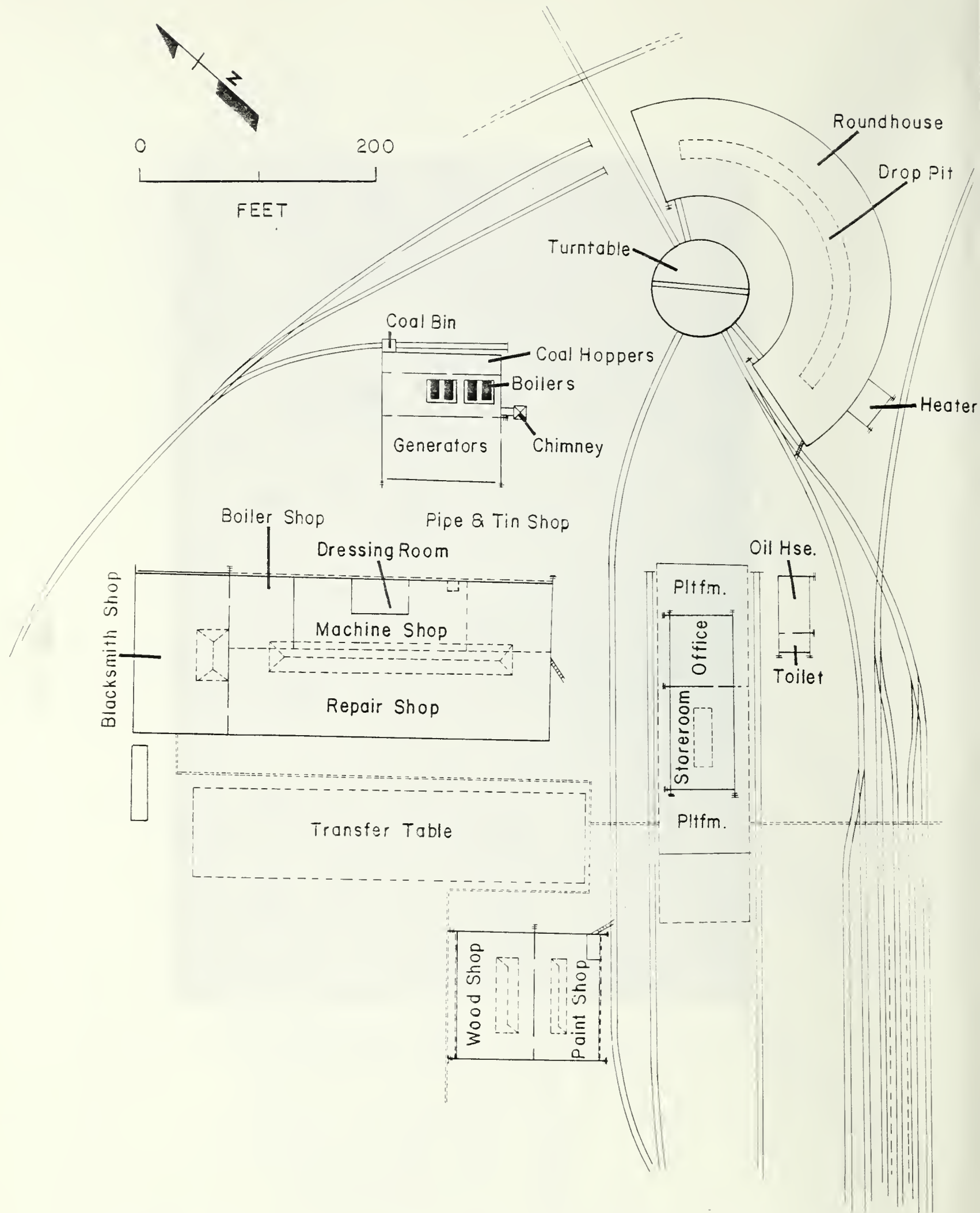


FIGURE 41. TRRA Brooklyn Roundhouse and Shops, Based on the 1910 Sanborn Insurance Map.



FIGURE 42. TRRA Brooklyn Roundhouse and Shops, Based on the 1919 TRRA Valuation Map.

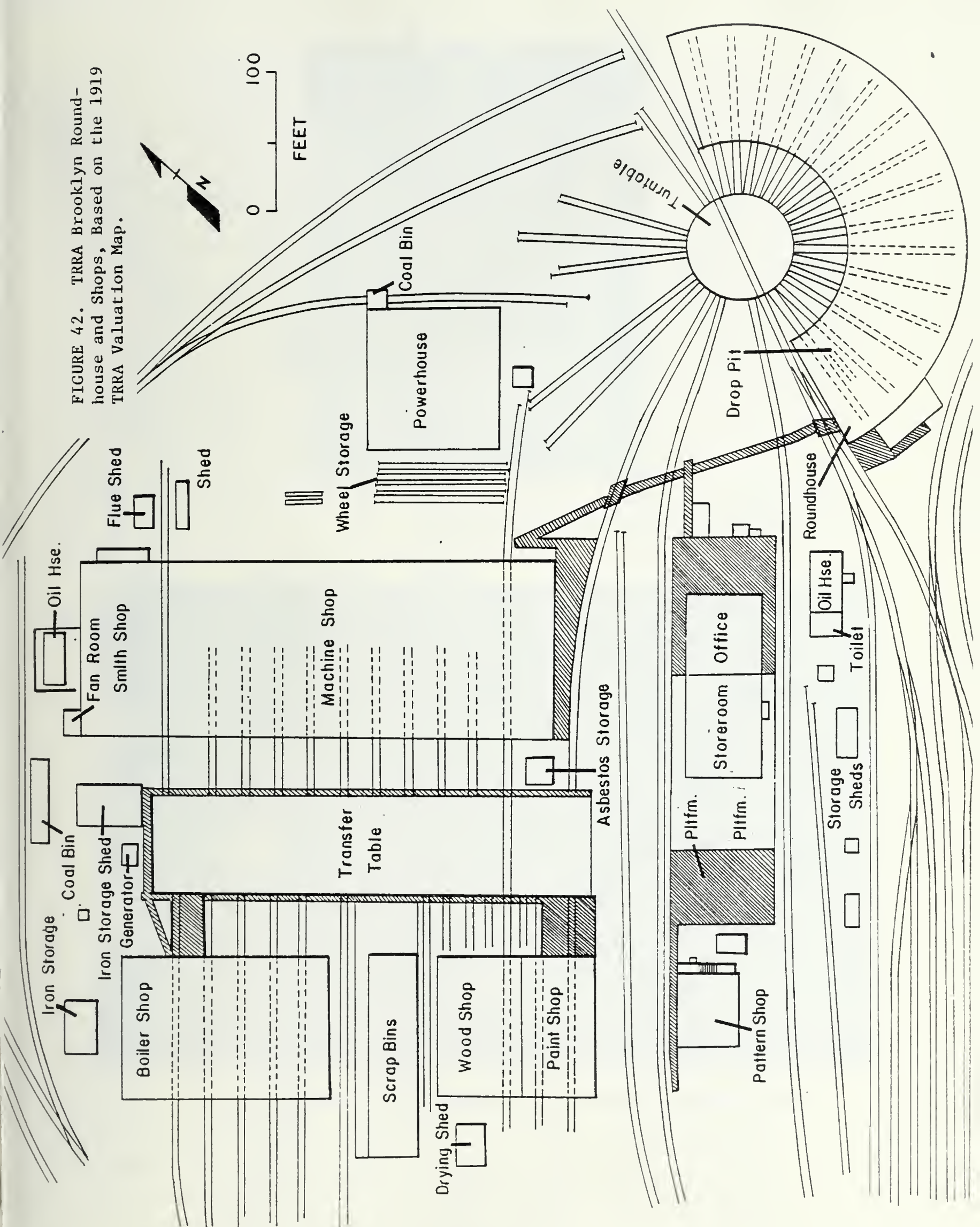
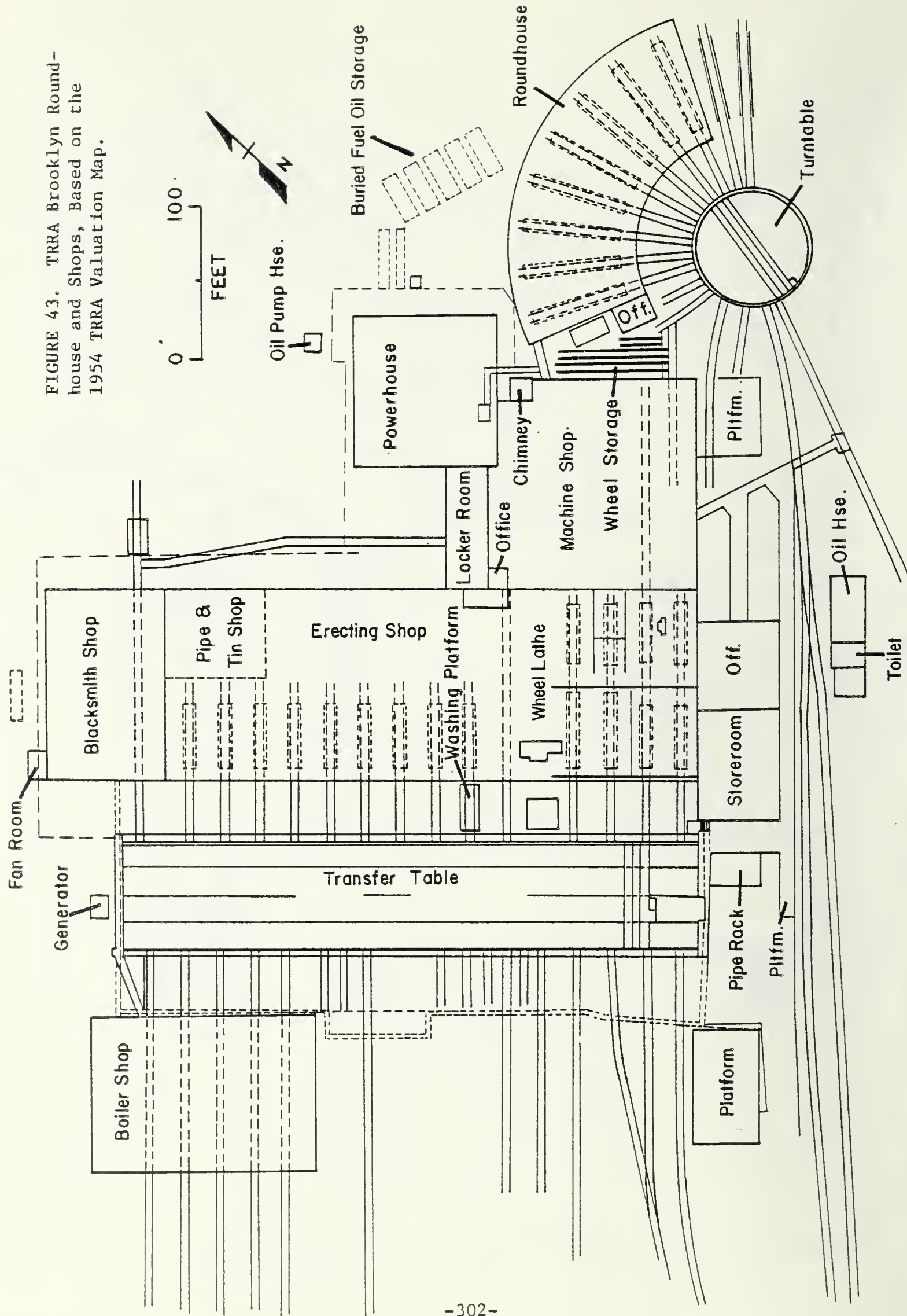


FIGURE 43. TRRA Brooklyn Roundhouse and Shops, Based on the 1954 TRRA Valuation Map.





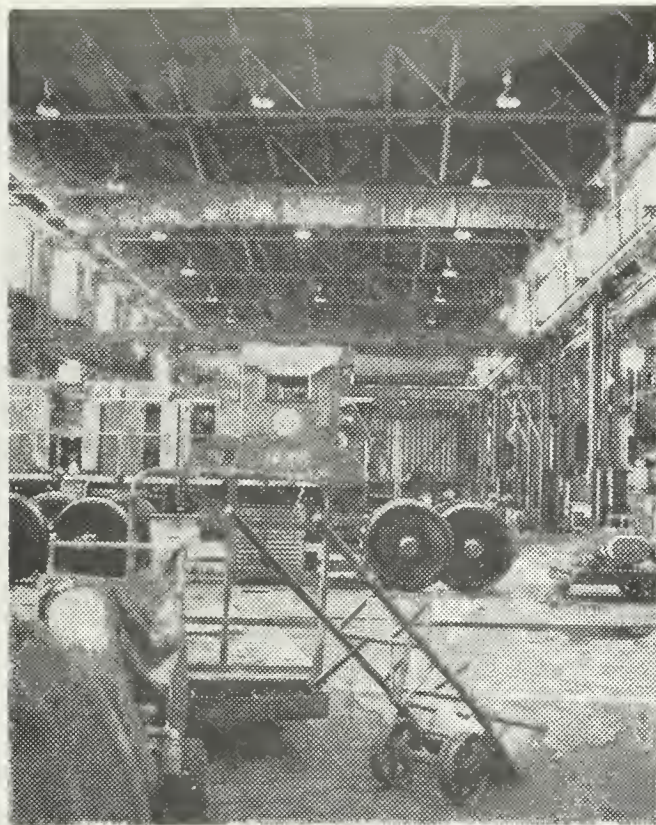


PLATE 59. A. TRRA Brooklyn Roundhouse and Shops, Interior of Repair Shop, 1980.



PLATE 59. B. TRRA Brooklyn Roundhouse and Shops, Niles Overhead Crane, 1980.



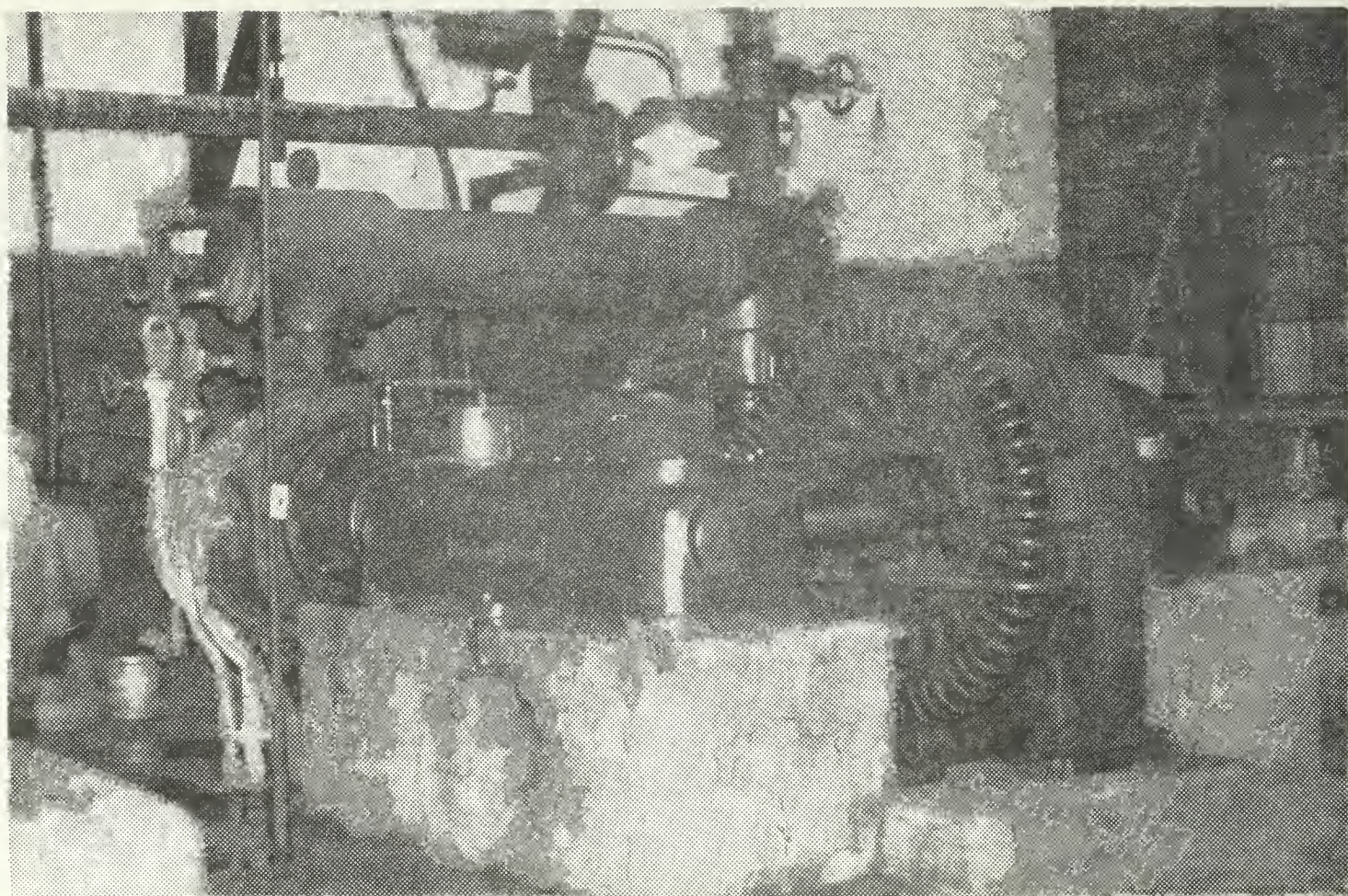


PLATE 60. A. TRRA Brooklyn Roundhouse and Shops, Ingersoll-Rand Generator, 1980.



PLATE 60. B. TRRA Brooklyn Roundhouse and Shops, Westinghouse Generator, 1980.



Note that the powerhouse was separated into three parts: the coal hoppers were located on the end next to the track spur which was used to deliver coal by railroad car; in the middle of the building were the boilers with a chimney; and on the southwest side of the building were the generators (Figure 41). Also note that the roundhouse was equipped with drop pits for removing and inspecting the carriage.

By 1919 changes can be seen in many areas of the complex. Additional railroad tracks had been extended from the turntable, possibly to allow room for standing locomotives awaiting entrance to the roundhouse or perhaps as a safety factor in case of fire in the roundhouse to allow quick removal of locomotives from the house without pivoting the turntable (Figure 42). The storeroom and office appear to have been unchanged, but southwest of the storeroom, a pattern shop had been constructed. Other changes included removal of the original boiler shop from the machine shop area and the construction of a scrap bin and a new and larger boiler shop west of the transfer table. Several other small shops and storage buildings also had been constructed since 1910 (Figure 42).

The facility underwent extensive changes between 1919 and 1954 (Figure 43). A new 95-degree south-facing roundhouse and a double track turntable reflected design changes in engine maintenance, probably as a result of the conversion to diesel. The presence of buried fuel oil storage tanks north of the roundhouse would support this thesis of a change to fuel oil-motive power as opposed to coal-fired steam engines. Sometime between 1919 and 1954, there was probably a stage in the operation of the roundhouse when both houses existed as a 265-degree combination steam and diesel maintenance facility. The double track turntable is a novelty for East St. Louis. Possibly it is another safety feature to allow fast removal of locomotives in case of fire in the roundhouse. Other changes included removal of the machine shop from the old repair shop facility and construction of a new and larger machine shop west of the new roundhouse with an attached lockerroom. Back in the old repair shop, changes included redesign of this building to incorporate an erecting shop, a wheel lathe, pipe and tin shop, and a washing facility (Figure 43). Southwest of the transfer table, the scrap bins and wood shop had been removed, as well as all coal bins, indicating increased reliance on petroleum energy. Figure 43 represents the configuration of the Terminal Railroad Brooklyn shops as they exist today, as there have been few gross changes in the facility over the last 30 years.

The Terminal Railroad Association Brooklyn Roundhouse and shops is an extensive railroad complex that, in its assemblage of facilities and shops, encompasses most of the important features of the railroad industry either intact or documented through archival material and maps. The significance of the TRRA roundhouse and shops is that it is a relatively intact example of the type of facility used throughout the country to service and repair steam locomotives. "As with all shops of the period, it was equipped to do every phase of repair work needed--wheels and axles, air brake, boiler, carpentry--nothing was jobbed out"(F. Curry, personal communication 1980). Based upon this demonstrated significance, the TRRA complex does indeed meet the criteria for inclusion in the National Register of Historic Places. If at all possible, the complex should be preserved in place; if this alternative is not feasible, however, it is strongly recommended that a complete architectural and engineering record be made of the complex by NAER (National

Architectural and Engineering Record), and that as much of the equipment as possible be salvaged and set up in a museum or a reconstruction.

### PARCEL 13

This tract of land is not actually located on the island, but south of the Poplar Street Bridge (Figure 3b). This location is just west of the pre-1851 Wiggins ferry landing.

The very first railroad in the state of Illinois was established in 1837 by former Governor John Reynolds, Vital Jarrot, and others to exploit the deposits of bituminous coal near Belleville. The railroad, which was constructed entirely of timbers, extended from the Wiggins ferry landing to Pittsburgh, a small coal mining town on the bluffs six miles east of Illinois-town. The first carload of coal was delivered to the landing in late 1837 via a horse-drawn car.

In 1838 the railroad was sold to William Anderson of St. Louis, who upgraded the road to accommodate a small steam engine. However, the railroad was still not popular and was abandoned for several years. The railroad was reorganized in 1859 as the Pittsburgh Railroad and Coal Company, and was extended to Caseyville. The railroad at that time handled both coal and passengers. Because of the harbor improvements and diversion of the river west of the island, the old Wiggins landing used by this railroad became landlocked as the shoreline migrated westward. In 1863 the Pittsburgh Railroad diverted Cahokia Creek north and constructed a dike to the new landing (Figure 13). In 1869 the name was changed to the Illinois and St. Louis Coal Railroad, and in 1870 the road was extended to Belleville, making the Illinois and St. Louis Railroad a total length of 15 miles. The railroad remained a 15 mile-long coal and passenger commuter train until 1890 (Boylan 1937:181-189).

In 1877 the owners of the Illinois and St. Louis Railroad and the city of East St. Louis were involved in a disagreement over a railroad easement through the city that the railroad claimed from an 1837 agreement. The city claimed that the easement had been forfeited. After a heated fight, the railroad finally pushed the tracks through Railroad Avenue (Figure 13) to the relay depot (Boylan 1937:189-191). For many years the Illinois and St. Louis Railroad operated along this same route, delivering passengers to the depot and coal to the landing on the river.

In 1890 the Illinois and St. Louis Railroad came under the control of the Louisville, Evansville, and St. Louis Railroad, known as the Air Line. In 1900 the L,E,& St.L Railroad was consolidated into the Southern Railway Company System, which controls the East St. Louis operation at present (Hanson 1975:704, 705). For many years the Southern Railroad maintained terminal freight facilities at the west end of Railroad Avenue, east of Cahokia Creek and south of Broadway Avenue. Their inbound freight facilities consisted of a curved freight house 357 feet long and 36 feet wide (Figure 7). This freight house was destroyed by the riot of 1917 (East St. Louis Race Riot Papers 1917). It was rebuilt on the old foundation (Plate 61a) and operated at





PLATE 61. A. Southern Railway Freight House in 1922. Courtesy of the Missouri Historical Society.



PLATE 61. B. Aerial View of the National City Houses, 1980. View is to the South.



least until 1959, after which it was destroyed or demolished never to be rebuilt. The freighthouse was constructed of brick laid in common bond. A portion of the 2-story office can be observed in the 1922 photograph, indicating that it had a gable roof and at least one bricked-in loading dock. The 1-story freighthouse consisted of 21 bays, each with an arched loading dock. A fanlight was placed in each of the arches, and the wooden loading bay doors could be raised or lowered with pulleys. A pent roof protected the loading bays from the elements (Plate 61a). The outbound facilities, located on Sixth Street, were 129-1/2 feet wide and 622-1/4 feet long. They are mentioned in the 1922 railroad engineer study but do not appear on any maps after 1932.

#### NATIONAL CITY (S-681)

The livestock industry developed in the early part of the 19th century on the east side of the river to supply the local demand for American Bottoms agricultural products in St. Louis. By the 1840s, two-thirds of all cattle, agricultural, and horticultural products supplied to the west side came from the American Bottoms (Wild and Thomas 1948:112). The two collection centers for the cattle were Paps Town (east of Illinoistown and the Wiggins Ferry) and at the upper ferry landing, known as Brooklyn (Brink 1888:521).

With the advent of the railroad and transportation lines to the east, the livestock business grew from a locally based endeavor to a regional collection and shipment center. The handling and shipment of livestock was conducted in much the same manner that the railroad handled any freight. That is, each side of the river had terminal freight facilities, in this case holding pens for collection of stock, for railroads that extended west of the river and those that stretched east. The ferries provided the link between eastern and western railroads across the river for livestock being shipped through the gateway area (Reynolds 1938:4).

The opening of the St. Louis National Stockyards in 1873 established for the first time in the St. Louis area a central location and organization for the transfer, holding, selling, and shipment of livestock. The impetus for the central collection strategy evolved out of a growing dissatisfaction among the railroad industry, livestock operators, and meat packers with the antiquated system then in use. The establishment of a centralized stockyards resulted in a more efficient livestock operation.

An agricultural and livestock based commercial center soon grew up around the St. Louis National Stockyards. It consisted of a restaurant; hotel; packing houses; seed and feed businesses; lumber, hardware, and farm machinery retailers; and fertilizer, tanning, and rendering plants. In 1907, the St. Louis National Stockyards and allied commercial interests were incorporated as National City. The city included all of the stockyards property as well as the cortege of packing companies and livestock-related businesses clustered around the stockyards. That same year a small residential section was established consisting of forty houses arranged in four rows on two streets and a combination church/



school and a combined fire and police station and store. Because of the limited space at National City, it was never a major factor in the housing of stockyard employees and, in fact, was utilized by employees of several companies in the stockyards area. In this way, it was unlike most organized company towns that were built solely to house workers for a particular corporation. Though perhaps not outlined in any official stockyard prospectus, a critical examination of the economic and political history of the East St. Louis area would indicate that the National City houses were established to ensure the required population of residency for a chartered town that was necessary for the commercial interests of the city to avoid paying municipal taxes to East St. Louis (see Rudwick 1964, Burbank 1966, and Judd and Mendelson 1973).

Local legend states that the houses were pre-fabricated model company houses built for the 1904 St. Louis Exposition (personal communication 1981). Bateman & Selby (1907), however, records that on January 23, 1907, eight months before incorporation, National City let a contract for the construction of 40 two-story buildings at a cost of \$3000.00 each (Bateman and Selby 1907:752-772). The site of the National City houses is over a low swampy area linked to Indian Lake. The swamp was prepared for construction by the deposition of coal clinkers to raise the ground surface above water table. The National City houses first appear on the 1909 map of the American Bottoms (Figure 7) and on 1910 Sanborn Insurance maps. Figure 44 depicts the plan of the National City houses as they appeared ca. 1910, and shows locations of test units excavated in August 1980.

Still owned by the National Stockyards, the National City houses are currently in varying states of repair (Plate 61b). Two of the structures were destroyed by fire, while others are currently in a state of abandonment. Still others are being kept up in relatively good condition. All have been extensively altered, although close examination of their construction reveals that, at the time they were built, they represented examples of sound, practical building techniques. In addition, the original design included indoor plumbing and gas lighting.

They are all frame structures, 1-1/2 stories high, covered with asbestos shingles, with 4 to 5 rooms, concrete rock-faced, ashlar foundations, and a rectangular shape of approximately the same size (Plate 62a). On the other hand, many of the houses show individual details that differ between houses, indicating a concern for personal expression. Although the majority of the houses have gabled roofs, several have hipped roofs instead. The placement of the front entrance varies from the center to the side, usually in the gable end, although there is one structure that has its front entrance in a non-gabled facade of the house (Plate 62b). Several of the rooflines possess a pronounced Dutch kick at the eaves (Plate 63a). The gable-end windows in the upper story range from a hipped dormer to an eyebrow window to an elliptical arch (see Plate 62a). However, all of the houses have central chimneys. Underneath the composition gravel/paper roof are the original wood shingles. A few of the lots are surrounded by what many have been the original picket fence, although the majority have either had the fences removed or replaced by wire fencing.





PLATE 62. A. Typical Examples of National City House Construction.



PLATE 62. B. National City House with the Front Entrance in the Side of the House.





PLATE 63. A. National City House with a Dutch Kick.



PLATE 63. B. National City Store/Post Office/Police Station/Fire Station.



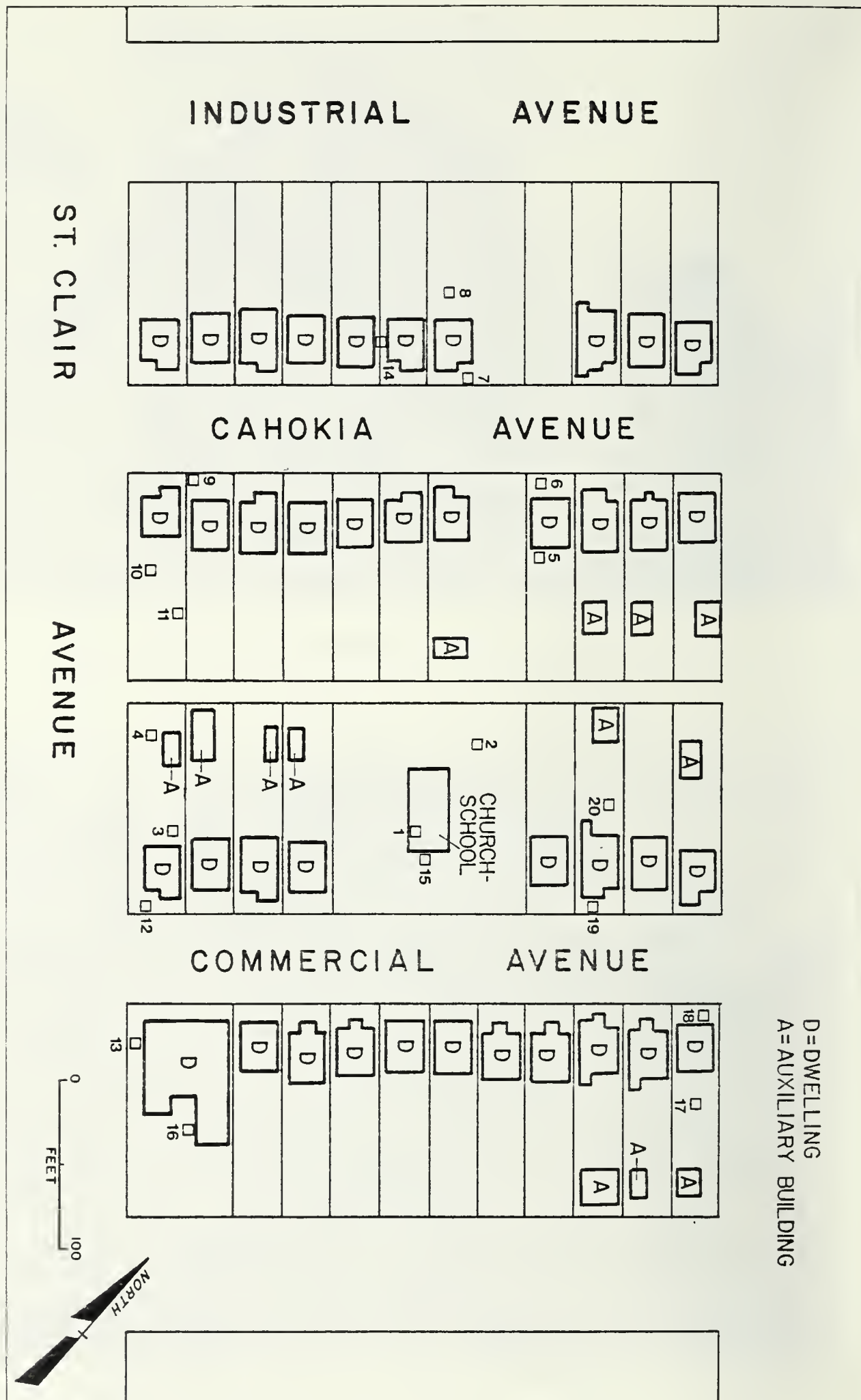


FIGURE 44. Site Plan for the National City Houses, 1980 Excavations.



Also a part of National City is the now-abandoned store/post office and police/fire station (Plate 63b). This one-story frame structure is built on concrete, rock-faced, ashlar foundations, and has a partially hipped roof. The store/post office and the police station have separate entrances onto St. Clair Avenue. The double entrances, as well as other architectural features, mark the dual commercial/civic function of the building. The south side of the building was the combination police and fire station, and is marked by the illuminated sign in the photograph. The north side of the building was the store and post office.

The police station, which included a chamber for the justice of the peace, offices, and prison cells, handled minor infractions of the law and traffic violations. The prison cells, small iron-barred cages on rollers with bunkbeds for two, are still stored in the building. The basement of the building has a loading incline at the rear and was probably used predominantly by the store. A small shed adjacent to the north side of the building sheltered the fire-fighting equipment, a fire hose on a two-wheeled carriage. The fire-fighting facility at National City was little more than a token measure, and the city depended on the East St. Louis fire department station at Whiskey Chute (near the National City corporation limits) for large fires (Kirschten 1965: 373). The store, which was established shortly after construction of the houses, was run on a credit system maintained with a ledger. Though for a period of time the store was reported to have taken unfair advantage of residents in terms of prices, no one was ever required to do business at the store, and it seems to have operated as a convenience store to save residents a trip to East St. Louis. The store was discontinued around 1950 and replaced for a while by a television repair shop.

An additional structure shown in Figure 44 is the combination church/school built as part of the original plan of the community in 1907, and salvaged and burned in the 1960s. Local informants describe the building as a one room, one-story frame structure on a cinderblock foundation. Steps led up to a front door on Commercial Avenue. The church/school was heated by a wood stove in the rear of the room, which was surrounded by a guard rail to keep the younger children from straying too near. The building was used as a school during the week and a church and meeting place at nights and on weekends (personal communication 1981).

Discussions with four National City residents have provided an outline of the history of the city and a brief sketch of the relationship between the city and the administrative structure of the National Stockyards. The present residents of the city can be divided into two categories: the long-term natives of the city, many of them retired stockyard or packing plant workers, and transient renters who have no roots in the community and may or may not be employed within the economic sphere of National City. This practice of renting to short-term occupants has apparently contributed greatly to the rapid decline of some of the structures in the community, since much of the maintenance of houses is left up to the prerogatives of individual renters or cooperating groups acting independently of the official infrastructure. The rental charge is probably well below comparable rents of other houses in the area and many residents have been willing to invest their own energy and money

into improvements and upkeep. The National City Police and Fire Departments are still available for calls, but with the reduction of residency, both services have been moved to new facilities in the stockyards complex, a quarter of a mile away. All of these developments (the general low priority the houses receive in owner upkeep and renovation and the removal of the store, school, fire and police departments) seem to be indicative of a general benign laissez-faire policy adopted by the stockyards in the last decade or so.

Earlier, the stockyards' attitude toward the National City community could be described as paternalistic, though apparently there was never the feudal control typical of other larger company towns of the late 19th/early 20th centuries in England and America. The National City charter was originally set up to place responsibility for administering the village to Swift's Packing Company. A mayor was elected who acted as liaison with Swift's and the stockyard company, and a board of directors was chosen to represent the city residents. Unfortunately, we as yet know very little about the actual functioning of these political bodies in the total administration of the National City.

During the period of Swift's control in the first half of the 20th century, the livestock industry was flourishing and the city received close attention. The houses were painted regularly, wallpapering was done annually, grounds and roads were maintained, and the first trees were planted. Later, Swift's shut down and various people from the town were hired to manage National City. The decline of the city seems to have begun at this time, and was possibly related to both the uncertain and ineffective management following the departure of Swift's, and the general economic decline of the local livestock and meat-packing industry that affected the number and kinds of tenants attracted to the city. The responsibilities of maintenance and locating and screening prospective tenants passed to the office of chief of police for awhile. This proved an unsatisfactory arrangement and control of the city presently resides with the National Stockyards, directed out of the Exchange Building (personal communication 1980-1981).

#### TESTING AND EVALUATION AT THE NATIONAL CITY HOUSES

The testing investigations at National City were directed along several different avenues of research aimed at exploring and evaluating the full historical, ethnographic, architectural, and archaeological potential of the community. The research tools used in the study included archival and literature research, oral history, photo-documentation, and archaeological testing. The results of the archival study, oral history, and photo-documentation were summarized in the preceding discussion. The recommendations based on the study of these aspects of the site will be included following the account of the archaeological investigations.

The archaeological study of National City was conducted to ascertain the nature and significance of the cultural deposits associated with the site. The lack of previous archaeological work on sites of this kind (i.e., planned communities of the early 20th century) precluded utilizing an existing model of urban land use patterns to locate the potential



archaeological resources. Because of this, the archaeological testing had to be devoted to systematic sampling of the area so that a representative picture of the kinds of buried resources present could be explored and the human processes involved in the deposition of the archaeological material understood. That way the sample could be used validly in an evaluation of the entire site. Realistically, this would be a difficult task to accomplish within the time limits of a testing project. However, as the National Register merit of the archaeological deposits would reside in the criteria of the scientific potential of the site to yield important information to history, then some measure of this potential to answer "important" questions had to be obtained from the testing operation by incorporating a research design or orientation to guide the excavation and analysis.

Because of the large area of investigation and the need to explore three kinds of sites in the city (the residential houses, the church/school, and the police station/store) with 20 tests, it was necessary to place the test units in relation to four general areas. These were the back yard, the front yard, the side yard, and inside the structure. In this way, a large area of the city could be examined in a way that allowed comparison from one house site to another, and between the civic and commercial areas of the village. The comparison of test units was felt to be possible by means of an artifactual analysis by functional group, and it was expected that the land uses in these different areas would be reflected in the artifact patterns. The research hypothesis based upon these assumptions may be stated as follows:

Given the planned and regular environment at National City in terms of the size of houses, lots, lot configuration, and administrative control, then testing in three comparable areas of the city lots (front, side, and back yards) will provide archaeological data reflective of the use of these areas. It is expected that the most variability between lots will occur in the large back yard area where residents could have exercised the most freedom of land use without censure, whereas the side lots and front lots will show the most artifactual regularity and will indicate similar land use from lot to lot in keeping with the regular and planned formula of the city in this high visibility area. It is also expected that the back yards will show a proportionately higher amount of use resulting in artifactual deposition than the front or side yards. The testing at the school/church and the police and fire department/store will generate archaeological data indicative of the non-residential use of these areas within the city.

The results of this artifactual analysis, as well as others, are presented in Chapter VII.

Figure 44 depicts the placement of the test units at National City. Test Units 6, 7, 9, 12, 18, and 19 were placed in front yards, Unit 14 in a side yard, and Units 3, 4, 5, 8, 10, 11, 17, and 20 were excavated in the back yards. At the church/school, Unit 1 was placed within the

structure, Unit 15 near the front steps, and Test Unit 2 was placed in the back lot area. At the police station/store, Unit 13 was excavated near the store entrance, and Test Unit 16 was placed near a back entrance.

A brief description of each test unit will be organized by residential, civic, and commercial site types, and in terms of the lot location (front, back, and side) for the residential areas. The discussion will include a description of the soil deposits, the cultural levels and fill layers, and important features uncovered during the testing.

## Residential Sites

### Front Yard

Unit 6: Excavation revealed a thin layer of dark brown loam .3 feet deep grading into a matrix of loam and cinder to a depth of approximately .7 feet below ground surface where cinder fill with no loam began. Excavation was halted 4 to 5 inches into the top of the cinder fill. A clay plug was located in the southwest corner of the unit, 1 foot below surface. The plug was a semilunar chunk of clay, 6 inches wide and 2.5 inches deep, that rested near the interface of the loam/cinder and cinder fill layers. It is believed to have been soil introduced by the planting of an ornamental plant. The mixed loam and cinder layer was a result of the mingling of a loam yard cap over the cinder fill on which the houses were constructed. Figure 45a shows the south wall profile of Test Unit 6.

Unit 7: Unit 7 had similar deposits as Test Unit 6, including brown silty loam on the top grading into cinder fill from .5 feet to .9 feet below surface. Four soil anomalies of loam and clay were located at a depth of about .9 to 1.1 feet below surface (Plate 64a), and were identified as probable locations of ornamental plants.

Unit 9: The soil deposits uncovered in this front yard unit were characteristic of most of the units, consisting of dark brown loam with patches of reddish-yellow clay, with inclusions of cinder at the top grading to cinders at 9 inches below surface. Another yard plant soil plug was located at the loam-cinder interface in the northwest corner of the unit. The feature was 7 inches in diameter and 3.5 inches thick. Figure 45b shows the east wall profile of the test unit.

Unit 12: The top level of this unit was sandy loam with some cinder extending to a depth of 1.3 feet below surface, underlain by cinder fill that was excavated to a depth of 1.5 feet below surface. A clay ornamental plant pad, 10 inches in diameter, was located at 1 foot below surface and extended 6 inches deep.

Unit 18: At the top of this unit was a thick sod layer overlying cinder fill with no intermediate cap of loam soil. A long, rectangular, light-colored silty loam pad, 8 inches wide, extended across the unit from southwest to northeast. Close examination of this feature revealed root fibers embedded in the pad that would corroborate the plant-related function of features of this type. The silty loam pad extended from approximately 6 to 10 inches below surface.



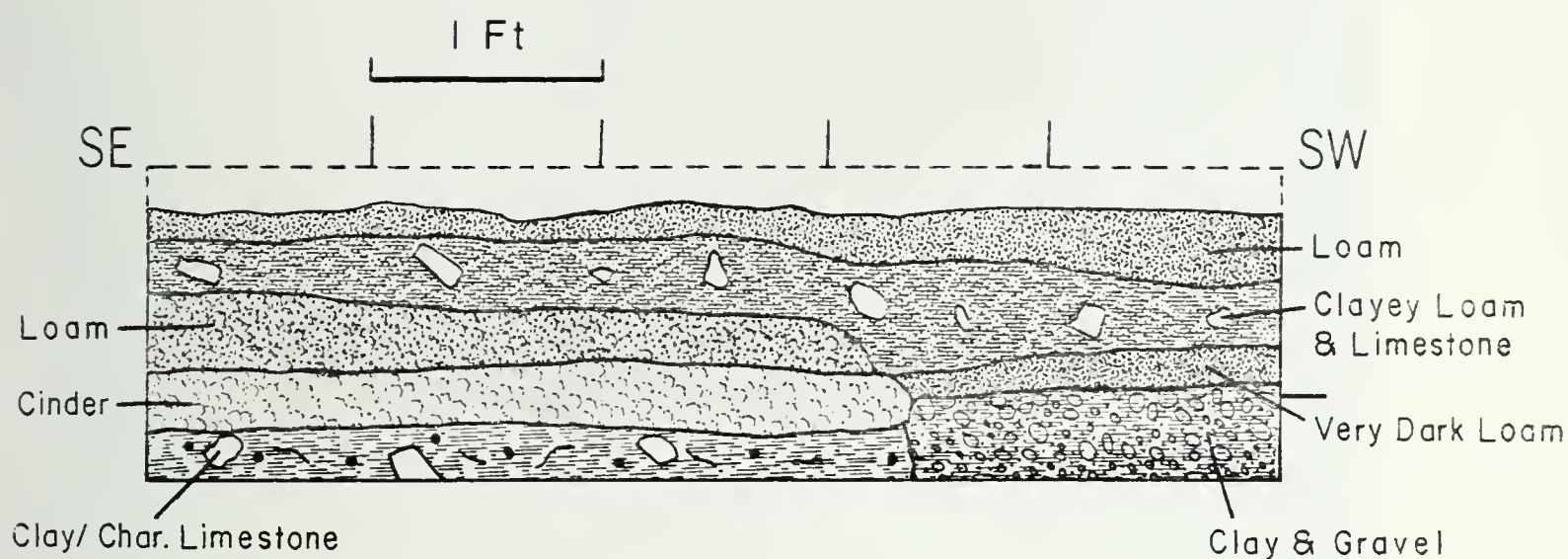


FIGURE 45. A. National City Houses, Test Unit 6, South Wall Profile.

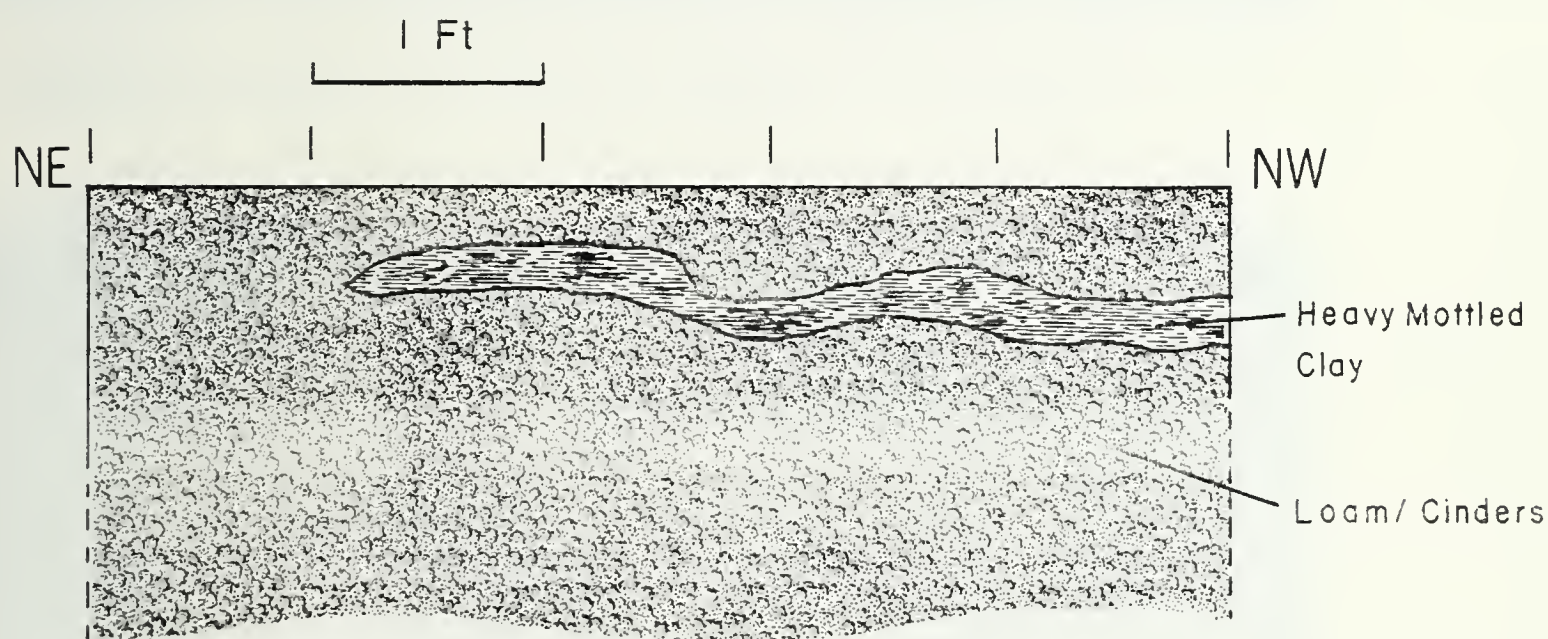


FIGURE 45. B. National City Houses, Test Unit 9, East Wall Profile.





PLATE 64. A. Floor of Test Unit 7, National City Houses, Showing Clay Anomalies that Represent the Former Locations of Ornaments.

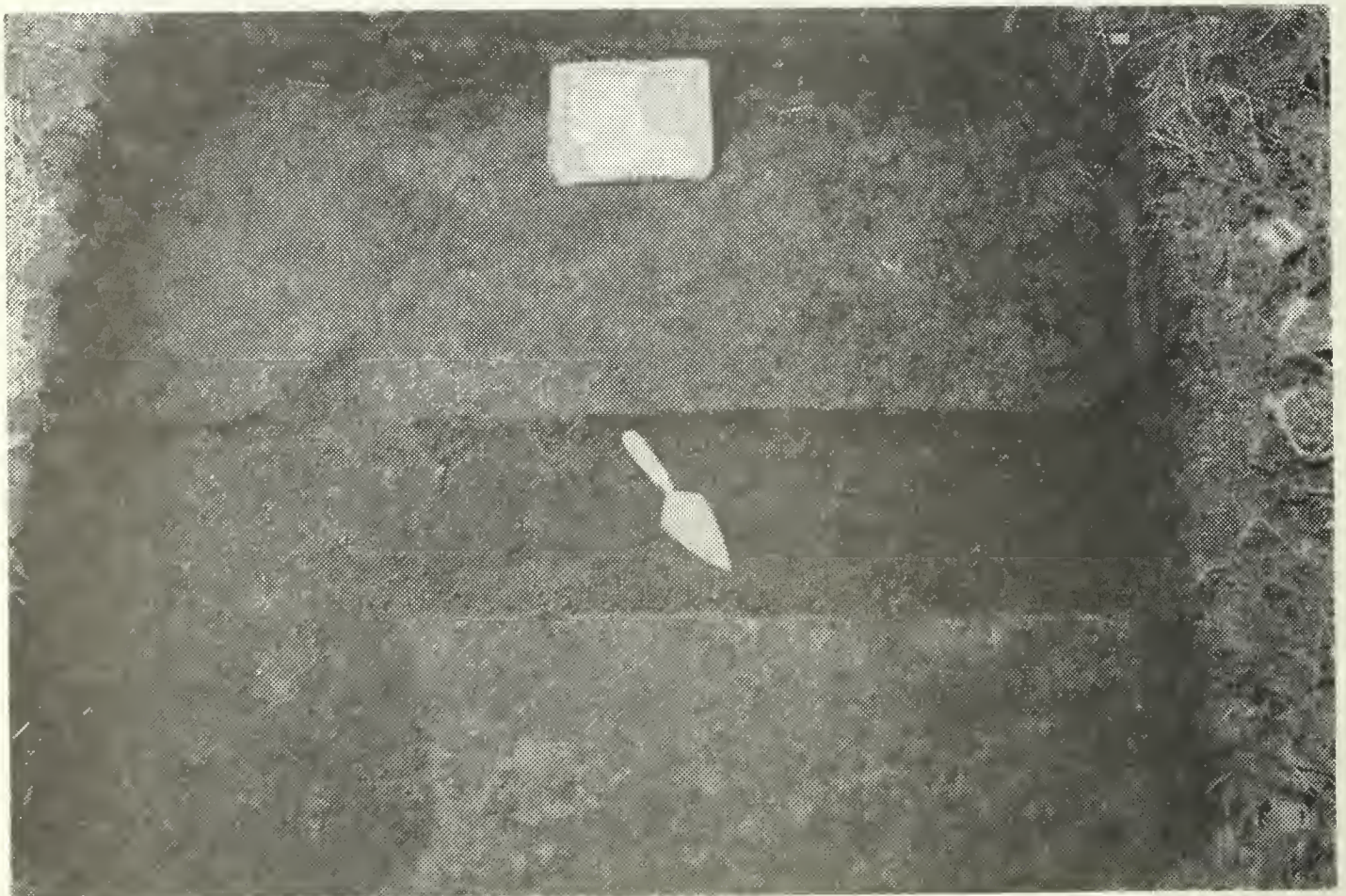


PLATE 64. B. Floor of Test Unit 8, National City Houses, Showing Utility Line Trench.



Unit 19: This test unit revealed a profile consisting of dark loam with small inclusions of cinder extending from the surface to about 8 inches below surface with cinder fill below. No remains of ornamental plants and very sparse cultural material was found in the excavation.

#### Side Yard

Unit 14: This test unit was excavated in the narrow side yard area between two structures (Figure 44). Cinder fill with some post-1907 occupational debris was found in this area. At 20 inches below surface, a utility line was uncovered extending parallel to the houses and probably linking with a gas mainline along Cahokia Avenue and house lines near the rear of the houses.

#### Back Yard

Unit 3: Excavation of Unit 3 uncovered a dark brown silty loam top soil, 4 inches thick underlain by loam, ash, and cinder that graded into cinder fill at 7 inches below surface. Cultural material was abundant in the top 4 inches of the unit.

Unit 4: This unit proved to have a profile consistent with the results of excavation of units elsewhere in back yards, and consisted of a top layer of dark brown silty loam with inclusions of cinders and coal extending to a depth of about 1 foot below surface where this layer graded into a cinder-dominated layer below.

Unit 5: The profile revealed in this unit was dark silty loam mixed with a small amount of cinder extending from ground surface to about 3 inches below surface. Cinder predominated below this, and the loam ended at a depth of about .5 feet below surface. Artifact density was heaviest in the top three inches.

Unit 8: This test unit deviated from the pattern set by other areas sampled. It consisted of dark loam mixed with cinder extending to a depth of 7 inches below surface. A utility line trench was uncovered at this depth extending east to west across the unit. A large excavation off the trench (Plate 64b) was a worker's trench associated with the original pipeline construction or done later, possibly for repair of the original line. The trench was 26 inches deep and about 1 foot wide, and was excavated into silty clay subsoil. The clay subsoil appeared only at this unit, and its presence suggests that the original topography of the swamp may have sloped upward from east to west. The inclusion of cinder in the trench fill suggests that the utility line construction occurred after filling and raising the area with cinders.

Unit 10: This test unit uncovered the remains of a dry-laid brick patio (Figure 46) on top of cinder fill. Outside the area of the patio was a .2 foot layer of yellow silty clay mottled with cinders that capped the cinder fill in the yard next to the patio. The patio was located across the back of the house from the rear entrance at the southeast corner of the house, and, according to metal probing in the lot, extended 25 feet from the house.

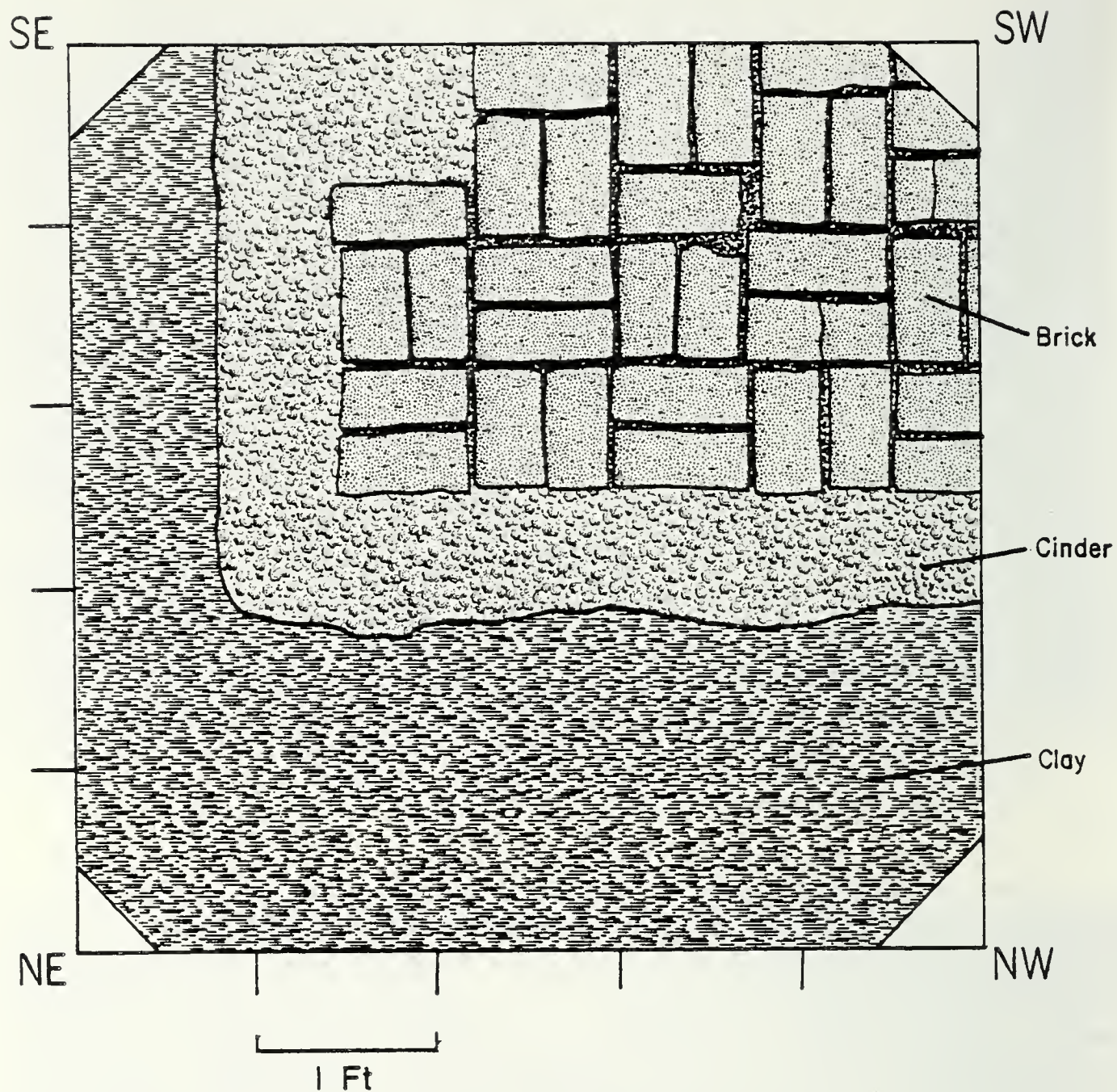


FIGURE 46. National City Houses, Test Unit 10, Corner of a Dry-Laid Brick Patio.



Unit 11: This unit was placed near Test Unit 10. Dark cinder fill with some driveway gravel and white sand was located in this unit in the top 3 inches. At a depth of 6 inches below surface, cinder fill was located.

Unit 17: A thin layer of sod and loam .2 feet deep was underlain by cinder fill in this test unit. The test extended to a depth of 6 inches below surface to ensure that the cinder was fill.

Unit 20: This unit contained a top level of loam mixed with cinder that ended at 3 inches below surface where cinder fill began. The excavation in the cinder fill was extended to a depth of 9 inches below surface.

#### Church/School Site

Unit 1: This test unit was placed inside of the southwest wall of the building, and was excavated to a depth of 3.7 feet below surface to the bottom of the cinder block foundation (Plate 65a). Cultural material included primarily building material mixed with cinder. Local informants noted that the school yard was filled with cinder, following demolition of the building, to level the yard for use as a playground (personal communication 1980).

Unit 2: Unit 2 was placed in the back yard of the school and revealed cinder fill beginning at the surface and extending beyond 2 feet below surface (Plate 65b).

Unit 15: This test unit was placed near the front entrance of the school and bisected the east cinder block foundation wall. A layer of recent cinder fill, 4 inches thick, overlay the basement fill west of the wall and the original cinder fill east of the wall. The test was terminated at a depth of 10 inches below surface.

#### Police and Fire Department/Store and Post Office Building

Unit 13: This unit was placed near the front entrance to the store. The excavation uncovered dark loam mixed with gravel and cinder in the top 3 inches grading into mostly cinder at 1 foot below surface. A large number of artifacts, mostly container glass, was recovered from this test unit.

Unit 16: This test unit was placed near a rear entrance to the police station. Cinder fill was uncovered below a one inch layer of sod and loam. The artifactual content of this test unit, as opposed to Test Unit 13, was very sparse.

#### SUMMARY

The testing at National City revealed that the cinder fill substrate was the original ground surface on which the buildings were constructed. In some areas, silty loam had been brought in to cover the cinder fill. This was generally applied to a depth of 6 inches and subsequently mixed with cinders at the interface of these two levels. In 84 percent of the





PLATE 65. A. National City Church/School Building, Test Unit 1, South Wall Profile.



PLATE 65. B. National City Church/School Building, Test Unit 2, Showing Cinder Fill.



cases, the front yard tests contained a loam top layer, and in 5 out of the 6 front yard test units evidence of ground preparation for ornamental plants was found. Ornamental plant evidence was not found in any of the other tests, and in only 50 percent of the cases (4 out of 8) did back lot tests reveal filling above the cinders.

## RECOMMENDATIONS

The significance of the National City houses lies in their initial construction as an early 20th century "planned community". As such, this community, which differs vastly from the unplanned amalgamation of structures at Kerr Island as discussed further on, appears to meet criteria for inclusion in the National Register of Historic Places. A preliminary archival and oral history study and a photographic record have been made of the structures. However, other types of data recovery techniques that should be used to mitigate the adverse effects of the MARGE restructuring at National City include further historical research to clarify the date and circumstances of construction, an intensive oral history program to provide information on the social history and interactions within the site, and the architectural recording by NAER (National Architectural and Engineering Record) of the construction details and variations in design of a sample of the structures at the site.

The archaeology of the National City site has the potential to offer limited information on the land use patterns and material culture of the residents, as discussed in Chapter VII. It is felt, however, that the archaeological investigations that were conducted during the testing phase will allow most of this information to be retrieved. In terms of socioeconomic, subsistence, and land use questions, it is believed that a concerted oral history program, a search of tax and census records, and a map study will prove to be more valuable than further archaeological investigations. Therefore, no further archaeological work at National City is recommended.

## ILLINOISTOWN (S-683)

It is difficult to discuss Illinoistown in an historical context without giving due consideration to the settlements that preceded Illinoistown in 1818. The earliest settlement in the area opposite St. Louis was Post St. Ursule, founded by Richard McCarty in 1765 and established just two years after the founding of St. Louis. This settlement was situated on a 400 acre tract of land between St. Clair Avenue and Illinois Avenue and from 10th Street to a point 300 feet south of Stockyard Avenue. This tract of land, known as U.S. Survey 627, became prominent again in 1857 when it was purchased as a land speculation twice by New York bankers and once by the Ohio and Mississippi Railroad. The settlement included a mill and presumably was located along the east side of Cahokia Creek. Post St. Ursule was abandoned in 1784 after an outbreak of fever (probably malaria) and was, according to sources, "a thing of the past" in 1805 when the U.S. Commissioners reviewed American

Bottoms land claims (Reavis 1876:49). This tract of land is located on many later maps including the 1975 U.S.G.S. topographic quad (Figures 3-8).

The next settlement in the vicinity of Illinoistown was the 1797 Piggott Ferry complex. Piggott's all-weather rock road, bridge, and two log cabins were the first of many commercial ventures at the site of Illinoistown. Piggott's 100-acre tract of land, part of a quasi-reservation for Indians, was located from near Mullikin Street on the island to south of Trendley Avenue. This tract is located on many later maps (Figures 3-8). However, Piggott's ferry buildings were west of Cahokia Creek and it was not until between 1805 and 1809 that Etienne Pinsoneau, a French-Canadian, purchased a tract 100 by 60 feet for a two-story brick tavern on the site of what would become Illinoistown. The town that Pinsoneau called Jacksonville was reportedly located in the vicinity of Main and Market Streets. Pinsoneau's tavern was retained when the land (lot 5, block 8) was sold in 1815 to Moses Scott, who erected a store and established the first mercantile business in the area.

One year later, St. Louis merchants McNight and Brady bought out all interests in the Piggott Ferry and the rest of Jacksonville from Pinsoneau. In 1817 they platted the village of Illinoistown, which included widening the streets and enlarging the lots from the plan developed by Pinsoneau (Figures 3 and 6). That same year, four men including Simon Vanorsdal and Moses Scott, former residents of Jacksonville, established a rival ferry and town on a 100-acre parcel north of the Piggott tract (Figure 3 and 6). The town, called Washington, was abandoned after a flood of the Mississippi River. In 1821 this tract was purchased by Samuel Wiggins to go with the ferry monopoly he established in 1819 (Reavis 1876:56-60). Wiggins moved on to amass even a larger land base with his marriage to Melanie Jarrot, whose father, Major Nicholas Jarrot, had amassed over 25,000 acres of property (Baldwin pers.comm.).

Thus began the polarization of the east side into two land divisions: Illinoistown, a small but prosperous river town, and the Wiggins ferry landing, where the commercial activity of the east side clustered at the landing between Cahokia Creek and the river. Always closely related yet divided, the Wiggins Ferry controlled almost all of the riverfront and enjoyed a near monopoly throughout the 19th century, while Illinoistown prospered as the settlement most benefiting from the commercial opportunities and traffic through the ferry. Illinoistown is described as an important river town in the American Bottoms throughout the first half of the 19th century. It owed all of its lifeblood to the ferry. The old Piggott bridge, located at the west end of Market Street, provided an access point from the ferry landing, and Market Street remained the important thoroughfare through the town to the roads east. The original Pinsoneau tavern and Scott store probably provided the core from which the rest of the community grew. These two structures were constructed between 1805 and 1817 when Jacksonville was the settlement east of the creek and appeared on the 1818 deed plat of Illinoistown.



The bad feelings between the two areas of the east side intensified in the mid-19th century after the Wiggins Ferry gained control of Bloody Island, the old river channel, and other property along the waterfront, as well as increased economic importance through the advent of the railroads terminating on the east side. Illinoistown, meanwhile, had its commercial foundation usurped by the domination of the ferry landing, establishment of a commercial enclave west of the creek, and denial of free access to the river by the ferry company.

In 1865 the Wiggins Ferry, Illinoistown, and the remnants of a settlement on the old McCarty tract were incorporated as East St. Louis (Reavis 1876: 69-73). The 1874 map shows the composition of this new town (Figure 13). On the riverfront is Bloody Island with lots and streets platted in 1865. The original Illinoistown located east of the creek remained largely unchanged from the 1818 plat and 1843 illustration (Figure 4). The town, consisting of 29 blocks, had been altered only by the encroachment of Cahokia Creek (Figures 4-7). Note that the public square, the designed location for the civic activities of the settlement, was of a central square configuration, a distinctively southern feature of courthouse seats in the Virginia's and Carolina's (Sears 1979:14, 15). Northeast of Illinoistown, between the town and Broadway Avenue, was the location of the old town of St. Clair, founded by John St. John in 1837. The Illinois and St. Louis Railroad was able to stake claim to an easement through St. Clair, but a dispute over the rightful owner of the town after St. John's death in 1846 hampered development and the old town became a squatter's town. North of St. Clair was the original town of East St. Louis, located where the major highways and railroads converged on the Broadway and Missouri (Christy) Avenue dikes. This section of town emerged as the central business district of East St. Louis. Northeast of the city limits, which were set in 1874 at St. Clair Avenue, was Illinois City, dependent on the St. Louis National Stockyards for support.

There is now only an incomplete picture of Illinoistown's constituent population throughout its development. Unfortunately, because of the close association between the two settlements, historical descriptions of Illinoistown tend to describe the town and the ferry landing without discrimination between the two. Descriptions by Schoolcraft in 1821, Beck in 1823, and Peck in 1837 suggest a resident population consisting of from 20 to 30 houses and a population ranging from 100 inhabitants to a dozen families. In 1837 Peck noted that the town contained a hotel, livery stable, store, and post office. The discrepancy between the number of commercial establishments in Illinoistown and its population would suggest that a large portion of the population employed in business located on the ferry landing actually resided in Illinoistown. The only other activity that the population could have sustained was the supplying of agricultural products to St. Louis, which, by the second quarter of the 19th century, was an important commercial activity in the American Bottoms. It is doubtful, however, that Illinoistown would have had a significant farmer residency since most of the agricultural population was dispersed throughout the American Bottoms in farmsteads located on large parcels of land (Baker 1974:29-41). The fluctuation of the population in Illinoistown with the damaging floods of 1826, 1844, and 1851 would also suggest a dependence on local commercial pursuits rather than the dispersed agricultural industry.

The transformation of Illinoistown by 1841 to "a lively commercial town" with 125 houses, an iron store, one distillery, two stores of general merchandise, five groceries, two town bakeries, one saddlery, one shoemaker, two blacksmith shops, one cooper shop, one tailory, two taverns or hotels, a newspaper, and a variety of other activities is an indication of the growing economic importance of the settlement. The changes can be explained as a result of economic maturation and developments in transportation, especially the introduction of the steamboat, as well as increased immigration from Europe. The population of Illinoistown at this time was probably primarily ethnic European engaged in small commercial crafts.

The technological advance in the use of steam motive power over animal power affected the east side tremendously in two ways. The steam-powered railroad and steamboat by the mid-19th century enabled efficient transportation of bulk goods and passengers over long distances, and changed St. Louis and the east side into a major regional commercial depot. Second, the advent of steam power, the availability of large quantities of coal and water, and other technological advances utilized in industry transformed the east side from a local commercial craft center to a major manufacturing center. This trend, which received impetus during the Civil War, picked up momentum during the expansion of railroads and industries at the end of the third quarter of the 19th century culminating in the golden age of manufacturing from 1890 to 1920 (Kircher 1974:7, 8; Koepke 1974:47-49).

The coming of the railroad and manufacturing era to the east side changed and enlarged the economic and resident base of East St. Louis. Yeakle in 1890 reported on the phenomenal growth of the city and noted that there was not enough housing in East St. Louis to support the influx of workers and "...the process of full residence by the army of employees in East St. Louis is going on rapidly as new houses are constructed for their accommodation" (1890:1-2). There would appear to have been a strong correlation in old Illinoistown between the post-Civil War industrial expansion and immigration, and the advent of multi-family dwellings. Though there is a lack of detailed maps and other archival data from this time period to offer a better estimate of the settlement patterns of the predominantly ethnic European immigrants, a field inspection at the site of Illinoistown indicates that some, if not most, of the multi-family structures located in this area of town could have been constructed in the last quarter of the 19th century. Additional archival research beyond the scope of the present study would be necessary to better understand the ethnic composition and mode of settlement for the worker force during this time period. The 1910 Sanborn Insurance map of old Illinoistown, the best map source for determining the location, function, and architectural details of individual structures, shows that in a seven block area there were eight boarding houses or hotels and a large number of single and multi-family dwellings. Still, it would not be possible from map information alone to determine the density of tenants in the houses since even single-family dwellings may have housed more than one family during housing shortages. A demographic analysis utilizing census records and insurance maps would enable a better understanding of the makeup of the population, design and differentiation of the city, locations of ethnic enclaves, and comparative housing conditions between groups of residents.



After the turn of the century another element was introduced to the East St. Louis population. Southern blacks, previously a very small percentage of the area's population, began migrating to the manufacturing centers of the north, and by World War I represented a significant portion of the labor force in East St. Louis. The blacks, like the strongly ethnic groups of Europeans, settled in enclaves. The black ghetto, or black belt as it was called, was the southern section of the city, south and east of Main Street and Broadway Avenue (Rudwick 1964: 7-17; and Figure 8). This included the oldest section of the city, since it took in the original site of Illinoistown, and would be the expected pattern of urban development. The oldest section of town changed from a diversified commercial/residential town in the mid-19th century to a predominantly residential area with some multi-family dwellings. With more expansion of the city, old neighborhoods suffered an outflight of residents to newer areas, abandoning the old low-standard housing to the influx of economically disadvantaged groups, in this case migrant blacks. The transition to a black ghetto was probably completed in old Illincistown by World War I and the race riot of 1917.

Old Illinoistown has remained a predominantly black community up to the present. Examination of aerial photographs and field inspection indicate that many of the structures located on the 1910 Sanborn map, and believed to be even older, survived up to the 1960s. During the 1960s and 1970s, demolition for the construction of Interstate Highway 55/70 and urban renewal resulted in the loss of 85 percent of the structures on the site of old Illinoistown. In the MARGE project area, which is northwest of the interstate overpass through Illinoistown, only 8 structures remain, including the old Elliot Frog and Switch Company located on the north side of Market, Brady, and Main Streets (Figure 7), two boarding houses, a store, two frame houses, and a recent bungalow style house and cinderblock structure believed to have been constructed within the past 30 years.

The boarding house located on the corner of Fourth and Market is a large, U-shaped, 2-story brick building, with a rock-faced limestone ashlar foundation on the front facade, and coursed limestone rubble foundations on the remaining three sides (Plate 66a). The facade of this prosaic Victorian Romanesque structure has seven bays and the sides have eight bays. The two front entrances are the characteristic semi-circular arched openings of this style, complete with limestone keystones and imposts (Plate 66b). The doors are inset on small stoops behind the arches. The two doorways lead to halls and stairways that separate the building into three 2-story rectangular sections. There was a minimum of six 1-story units and possibly more depending on the partitioning of these units. The windows on the stairwell are rectangular (Plate 66b). The downstairs rectangular windows on the front facade are decorated with limestone at the corners and on the sides, and have stone sills. The boarding house is shown on the 1910 Sanborn Insurance map and is probably a decade or two older.

The structure immediately next to the apartment house is described on the 1910 Sanborn Insurance map as a store but it appears from Plate 66a that the second story could have been a private residence. The architectural conformity with the boarding house next door with respect





PLATE 66. A. Brick Boarding House and Adjoining Store in Illinoistown, 1980. View is to the West.

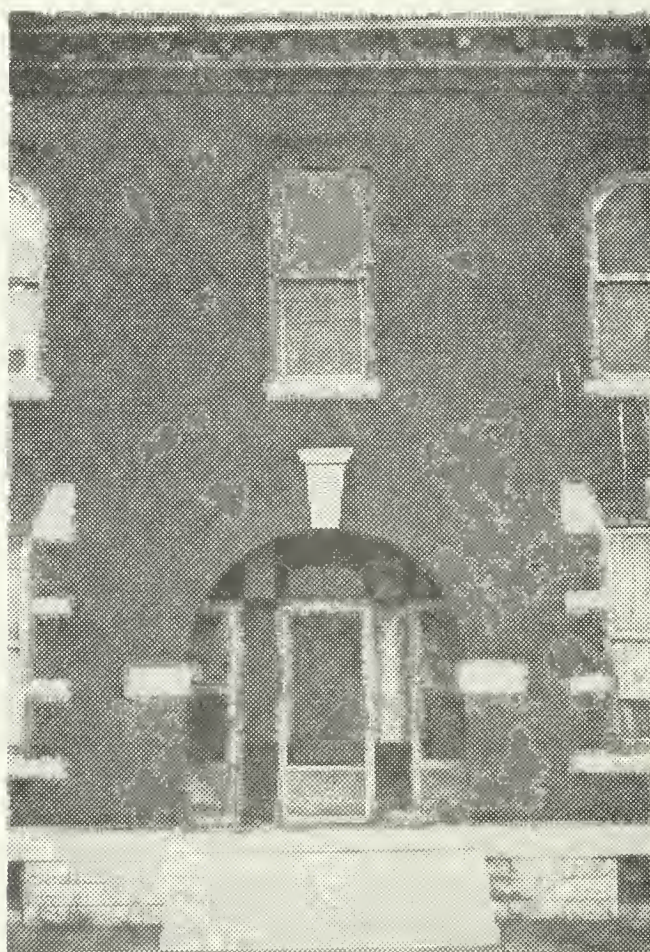


PLATE 66. B. Closeup of an Entrance to the Brick Boarding House in Illinoistown.



to the height of windows, sills, use of pilasters, decorative crown work and other details would indicate that the store is contemporaneous with the boarding house. Both buildings recall a period when the community was established and still on the upswing, but after the early period of frame construction and the high grade policy. The two buildings probably date to between 1875 and 1900. Structures of this style are not unique to the city or country and nomination to the National Register is not recommended. The photo-documentation and mapping of the structures constitutes adequate documentation.

The boarding house at the corner of Fourth Street and Trendley Avenue, on the other hand, is reminiscent of an earlier period of Illinoistown history. This frame structure is 2 stories high, with a coursed limestone rubble foundation and a flat composition gravel roof (Plate 67a). It originally was covered with wooden weatherboarding, although this has now been covered with a combination of aluminum siding and asbestos shingles. The 1910 Sanborn Insurance map indicates that a room at the street corner was a store, probably only on the first floor. The boarding house occupied the remainder of the space. It is difficult to determine the construction date of the boarding house because of the alterations of the exterior and absence of an inspection of the interior of the building. The adherence to the high grade building code would indicate a post-1875 date of construction. While the structure has possibly been altered beyond the level of historical integrity required for National Register consideration, architectural features still surviving in the building might offer significant information on early urban architectural practices in the city. An adequate evaluation of the structure would entail photo-documentation of the interior, examination of the walls, support members, and foundation for evidence of important stylistic features, and archival documentation and oral history to the extent that the period of construction, the function, owners, and periods of architectural alteration would be available for a National Register evaluation.

The house situated directly east of the boarding house at Fourth and Trendley is abandoned and in an advanced state of disrepair. It is a 1-1/2 story, two-bay shotgun house with a gabled roof and two interior chimneys (Plate 67b). The structure is frame and sits on a coursed limestone rubble foundation. The house is not unique in the city, and since better examples of this type of architecture exist in the area, this building is not recommended for consideration of inclusion in the National Register of Historic Places.

#### ARCHAEOLOGICAL TESTING AT ILLINOISTOWN

The archaeological testing of the original site of Illinoistown was aimed at determining the significance of any archaeological deposits associated with the use of this area since its original occupation in the early 19th century. While the existence of structures and foundations on the site made location of the late 19th century components of the town somewhat easy, the determination of the potential location of the early and mid-19th century archaeological components was more problematic.



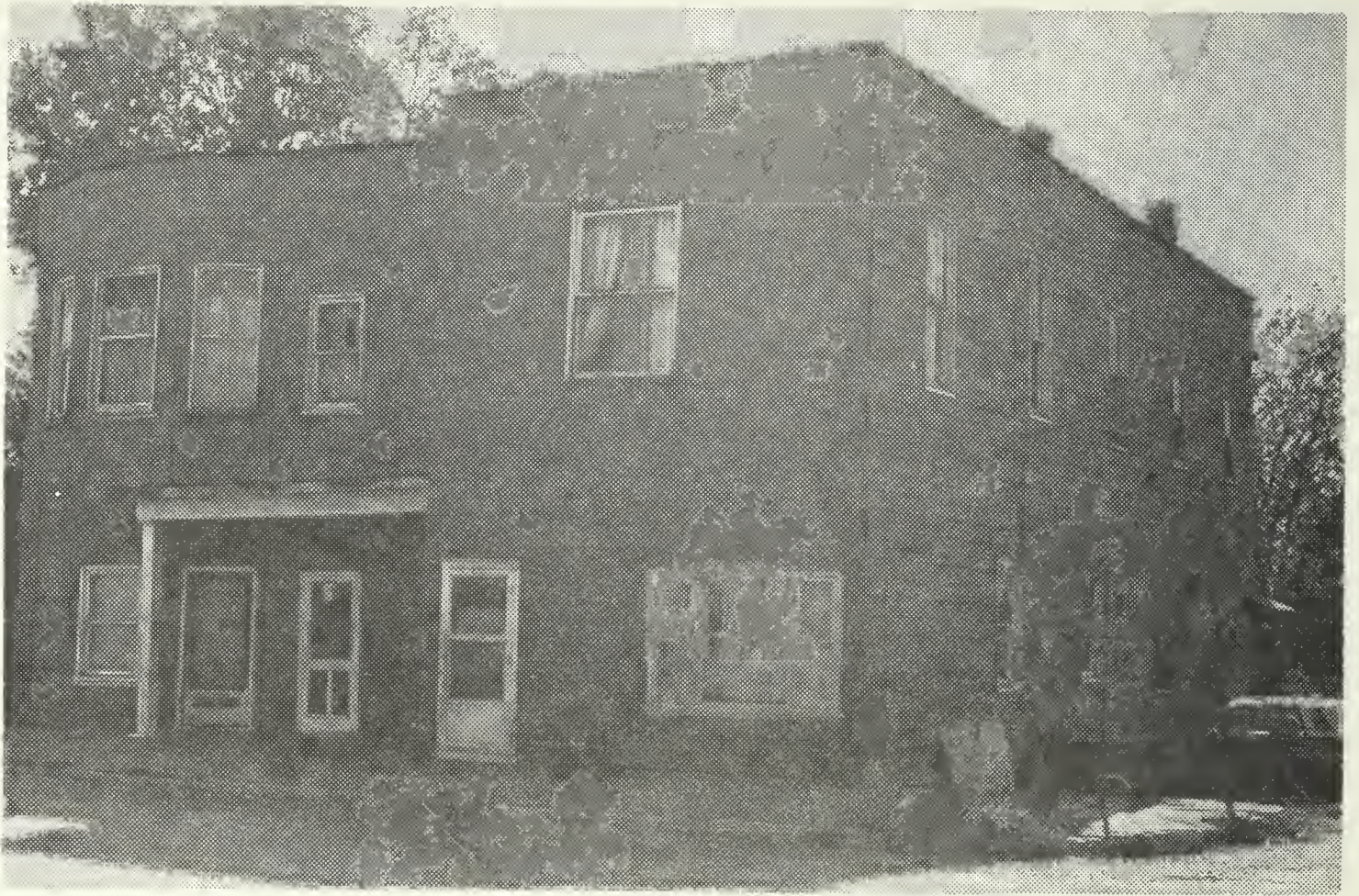


PLATE 67. A. Frame Boarding House in Illinoistown. View is to the Southeast.



PLATE 67. B. Shotgun House Still Standing in Illinoistown. View is to the Southwest.



The sketchy documentation of the early town suggested the locations for two early structures at the corner of Main and Market Streets. These are the 1805 Pinsoneau tavern and the 1815 Scott store. However, examination of the 1910 Sanborn Insurance map indicated that two hotels had last been built on the corners of these streets, and any intact deposits would be located below these hotel foundations. Since this area was additionally covered with rubble and would have required more time than could be allotted in this small area, the decision was made to test elsewhere on the site of Illinoistown to enable a more complete and wider picture of fill and soil deposits in the four-block area of study.

Since no information was available on the location of the early to mid-19th century structures or activity areas, the placement of test units was determined by the distribution of late 19th century structures and foundation remains. This enabled an archaeological exploration of at least some of the late 19th century components and still offered the possibility of encountering earlier deposits below the post-1875 cultural levels.

Since contractual agreements provided for a density of only 5 test units per block (20 in all), placement of the 5-foot square, hand-excavated units was done selectively in areas that posed a high potential for the location of cultural deposits, with no provision for statistical sampling, the excavation of control units outside of culturally sensitive areas of the lot, or clustering of test units to collect data for intra-lot analysis. This posed a serious handicap to the successful testing of a research design, and dictated that the investigation would be primarily exploratory rather than problem-oriented.

A brief discussion of the testing operations at Illinoistown follows. The results of the testing within each unit and trench will be summarized, and information on the artifactual content will be discussed where pertinent. Final recommendations for the site of Illinoistown will follow the testing results.

The areal parameters of the archaeological investigations were limited to three blocks: two blocks between Bond, Trendley, Main, and Fourth Streets that have been altered by the relocation of Main Street and a block on the southeast side of Fourth and Trendley (Figures 47-49). Other blocks in the area were excluded because of impenetrable concrete fill, restrictions on excavation within highway and powerline easements, or property owner denial of access. Four 5-foot square test units were placed in the block bounded by Market, Main, Trendley, and Fourth Streets (Figure 47). The results of these tests pointed out the need for a modification in the original plan because of deep fill deposits overlying the 19th century ground surface. A backhoe was used to excavate two trenches in the block north of the first one tested, and two trenches were excavated on the third block at the corner of Trendley and Fourth (Figures 48, 49). In addition, because of the absence of mid-20th century fill deposits, two 5-foot square test units were excavated in this third block, for a total of six 5-foot square, hand-excavated units and four 12 to 40 foot-long backhoe trenches. The testing discussion will proceed in the order that the blocks were studied.



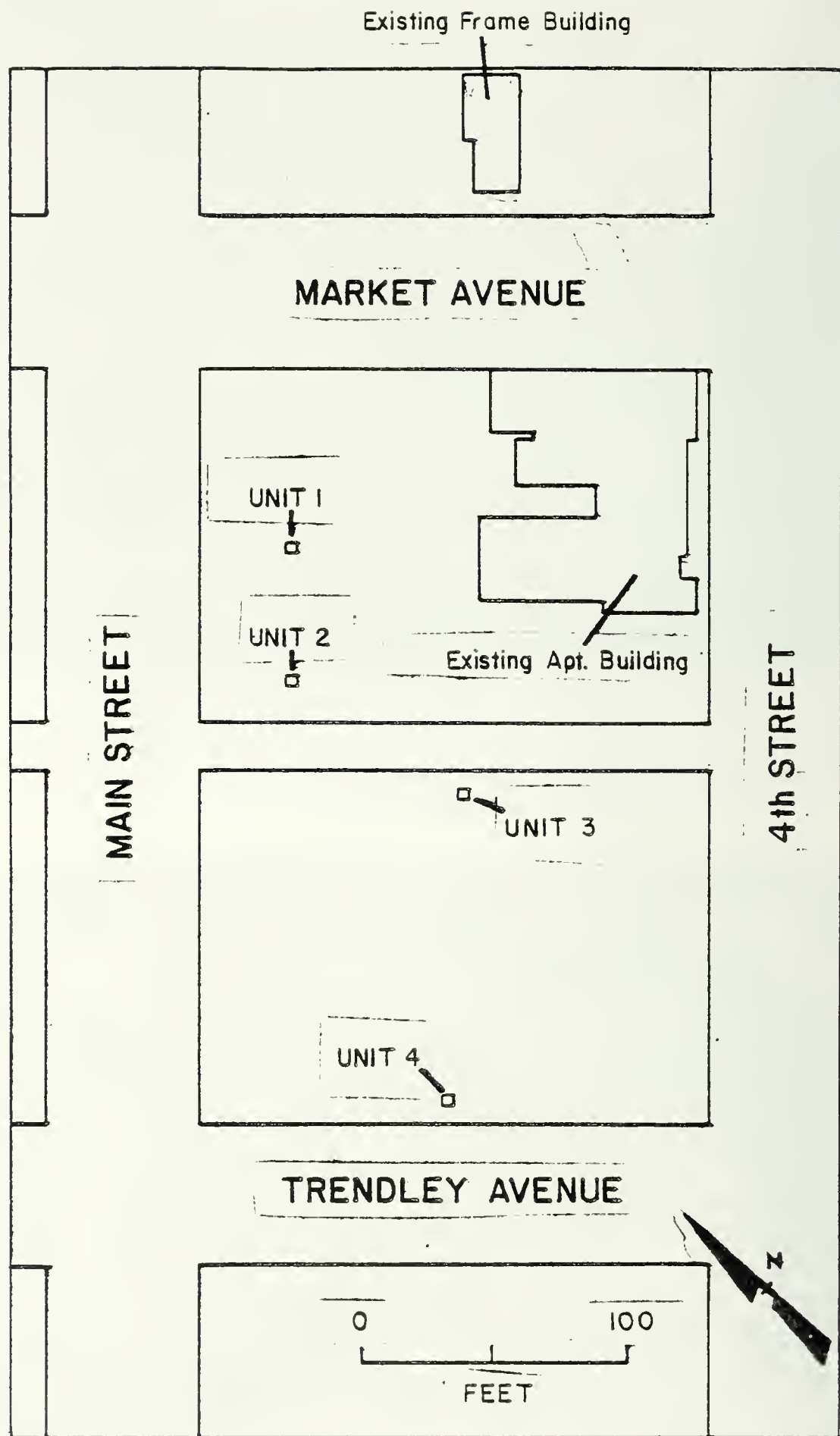


FIGURE 47. Illinoistown Testing Investigations, Site Plan #1.



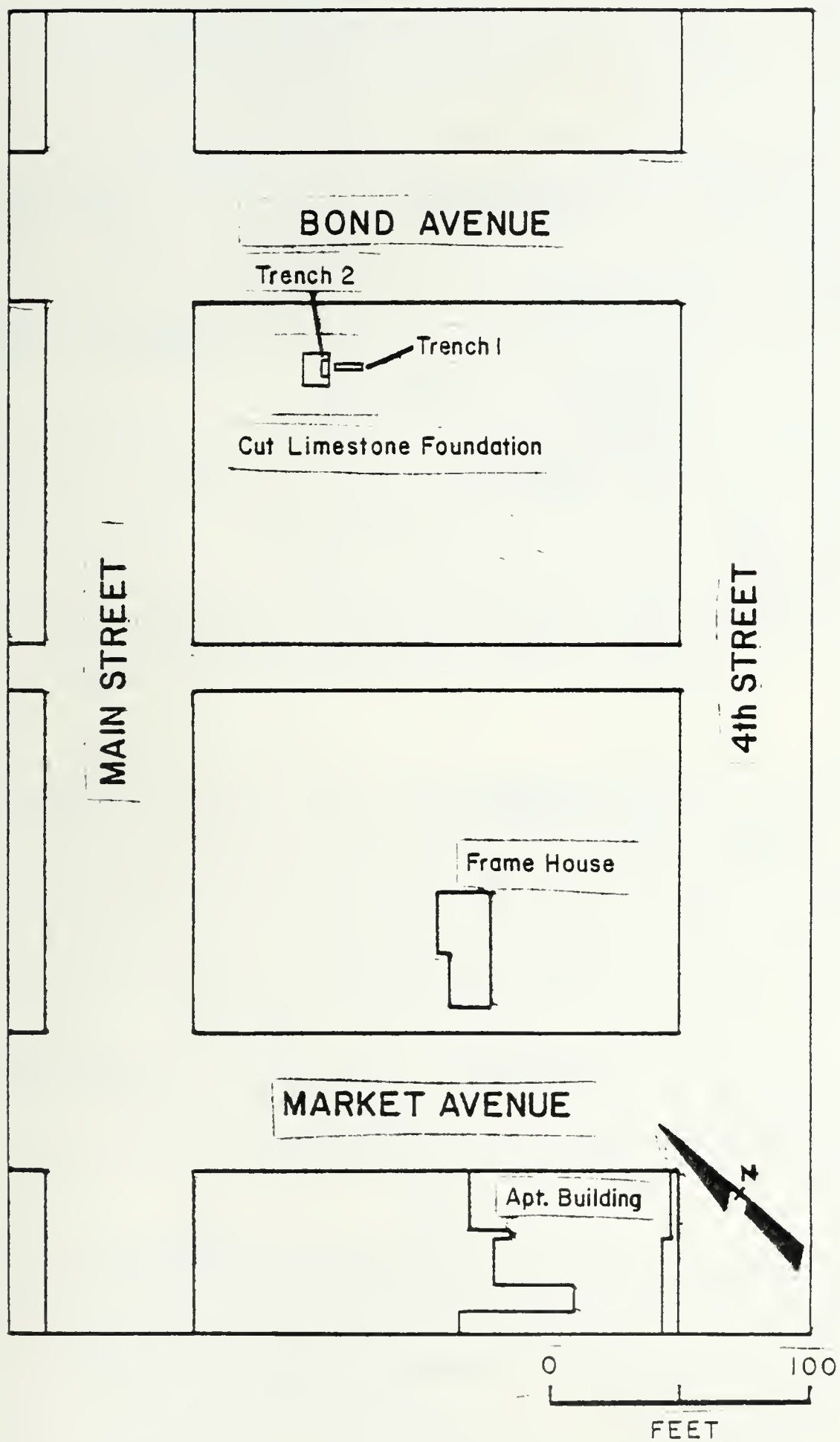


FIGURE 48. Illinoistown Testing Investigations, Site Plan #2.



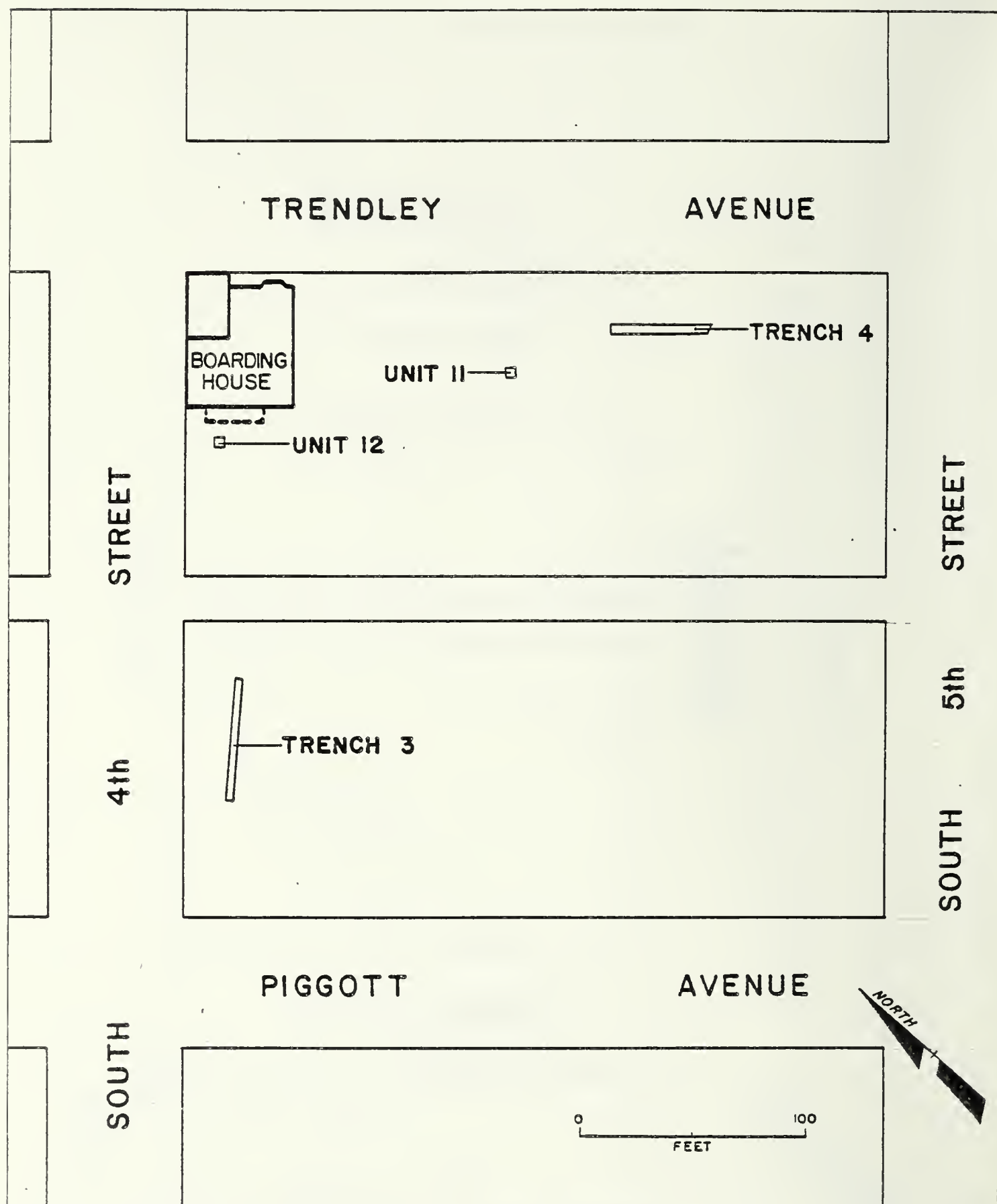


FIGURE 49. Illinoistown Testing Investigations, Site Plan #3.



Four 5-foot square, hand-excavated test units were placed in the first block between Market, Main, Trendley, and Fourth Streets. This block is 196 feet wide and 300 feet long, and divided by an alley connecting with Main and Fourth Streets (Figure 47).

Test Unit 1 was placed in a location that was previously the site of a large boarding house fronting Market Street. The 1910 Sanborn Insurance map depicts the boarding house as a 2-story, rectangular frame building, 55 feet long by 38 feet wide, with a 2-story extension from the rear that measured 16 feet wide by 33 feet long. A front porch on the first floor with a wood shingle roof was located next to Market Street. A balcony on the second story was located at the L-shaped rear. By 1959 the front and rear porches and the rear building extension had been removed. The structure was demolished in the 1960s or 1970s.

Unit 1 was excavated to a depth of 4.4 feet below surface (Plate 68a). The top 3 feet consisted of mid- to late 20th century landfill material (Levels A through D). A bottle with a maker's mark that dates to 1953 and another with a date of 1954 were found in this level, along with a 1969 U.S. penny. Examination of aerial photographs prove that the date of deposition for this fill layer was after 1959. The landfill material was followed by 1.3 feet of boarding house structural material, ash, and artifacts that were in the structure when it was demolished (Level E). A dry-laid brick basement floor marked the bottom of the boarding house occupation level. The brick floor was underlain by sterile silt.

Some nearly complete canning jars with dessicated vegetable remains, and bottle glass with a maker's mark of 1929 to 1954 was found on the dry-laid brick floor. The intact canning jars, ash, and charcoal suggest that this level originated with the demolition of the boarding house. The occurrence of burned artifacts and charred wood indicates that there was a fire in the structure at some point in time that probably did not completely gut the building. When comparing the fact that the latest date for artifacts recovered from the basement level is 1954, while aerial photos show that the structure was still standing in 1959, it is possible to suggest that the structure may have been abandoned for several years prior to demolition. The consistent dates in the mid-1950s for the demolition material in the fill and for the basement level would not rule out the probability that the 3 feet of fill came from demolition of the boarding house and other nearby structures, with possibly the introduction of silty loam or silt during grading of the lot.

Test Unit 2 was placed southwest of Unit 1 and north of the alley (Figure 47). The 1910 Sanborn Insurance map indicates that this was a location just a few feet northeast of a 1-1/2 story frame stable. The 1955 Sanborn Insurance map shows a small frame dwelling at this location that was also present on 1959 aerial photographs. The structure was probably demolished in the mid-1960s.

Test Unit 2 was excavated to a depth of 2.6 feet below surface, and auger tested to a depth of 6.9 feet below surface. From the surface to a depth of .83 feet below surface was a demolition layer consisting of





PLATE 68. A. Illinoistown Testing Investigations, Test Unit 1, Showing the Rubble Fill.

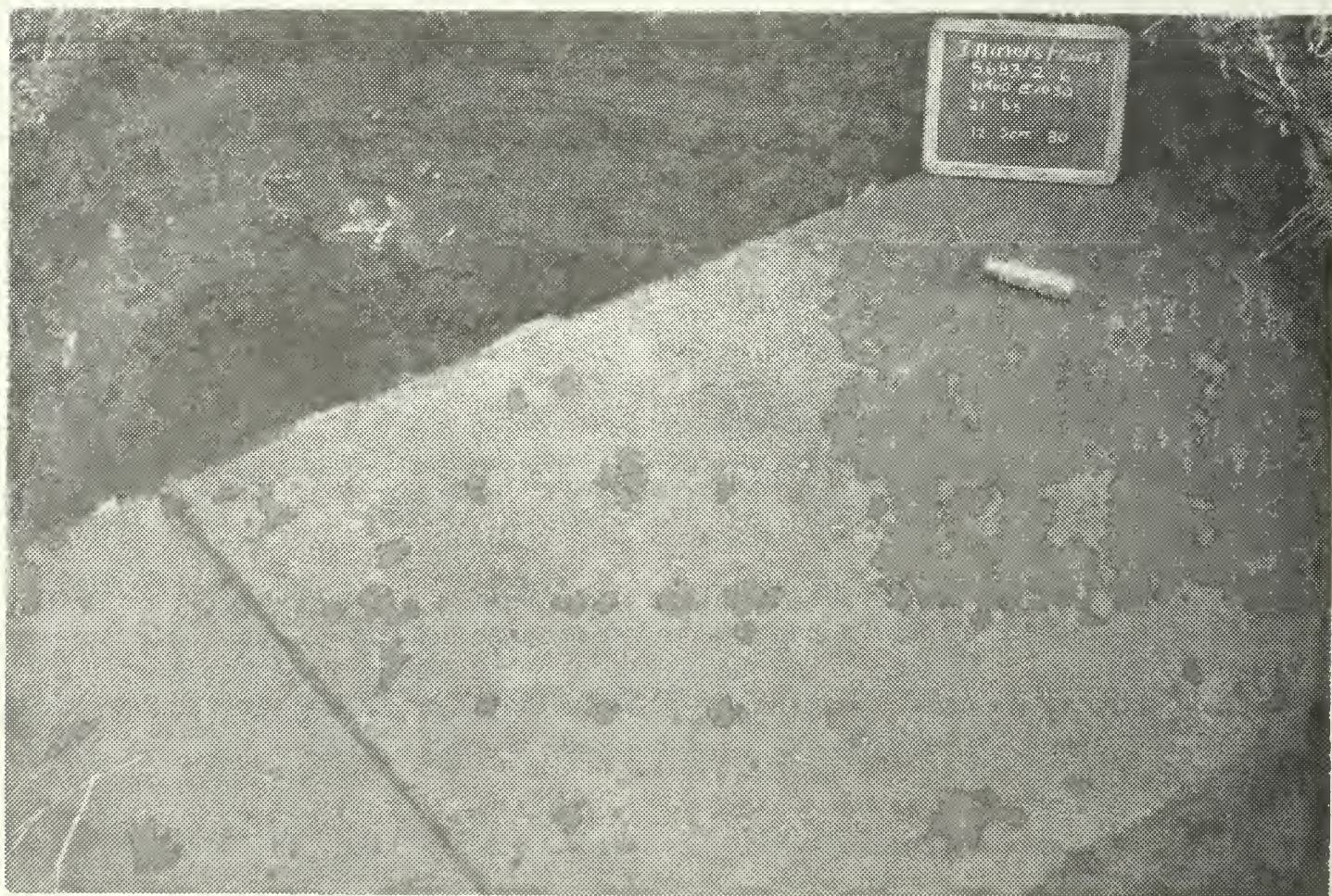


PLATE 68. B. Illinoistown Testing Investigations, Test Unit 2, Showing an Exposed Portion of Buried Sidewalk.



sandy loam with ash, coal, charcoal, cinder, building material, and cultural remains (Levels A and B). Based on bottle glass, this level appears to have been deposited after 1964. At the base of this level was uncovered a portion of a sidewalk that extended through the unit from east to west (Plate 68b). The sidewalk probably connected the brick apartment building at the corner of Market and Fourth Streets to Main Street. From .83 to 1.33 feet below surface was a light-colored silt lens followed by dark gray ash and cinders (Level C). There was a complete absence of demolition material in this level, and other artifactual material included a piece of mortar, window glass, and a clay marble. Level D (1.33 to 1.75 feet below surface) was a band of light brown silt. Cultural material consisted of butchered mammal bone, clear container glass, earthenware, nails, and nonidentifiable metal. Level E extended from 1.75 to 2.60 feet below surface. It consisted of a dark brown silty loam with chunks of coal and cultural material, including ironstone, pearlware, and porcelain ceramics; bottle glass; butchered mammal bone fragments; window glass, bricks, nails, and metal. There were no artifacts from this level to provide a firm terminus post quem, although it probably dated to before 1900, based on the presence of pearlware and a cut nail. An auger test was placed in the floor of Unit 2 to determine the soil deposits beneath the bottom excavation level. Sterile silt was found at 3 feet below surface, clayey silt at 6.25 feet below surface, and clay at 6.9 feet below surface. No artifacts were recovered from the deposits below Level E.

The fill levels (A and B) located above the concrete sidewalk are consistent with the results of Unit 1. Below the sidewalk is the pre-demolition intact surface of the lot. The deposits below the sidewalk probably date to before 1900, and appear to be household refuse and coal stove dumping deposits extending to a depth of 1.7 feet below the fill.

Test Unit 3 was located southwest of the alley about midway between Main and Fourth Streets (Figure 47). The unit was located at the site of a small wood shingle-covered frame building located on the 1910 Sanborn Insurance map. It probably served as an outhouse. This area of the lot was vacant in the 1955 edition of the Sanborn map.

The top 3 feet of Unit 3 consisted of sandy loam with gravel, and an ash/cinder lens, that was filled with cultural material (Levels A and B). The trash deposits included ceramics (porcelain, stoneware, pearlware, whiteware, ironstone, creamware, and earthenware), bottle glass and closures, bone and fruit remains, window glass, nails, building material, and clothing-related artifacts. Although a wide temporal range of material was reflected in the deposits, it appears that most of the material dated to the late 19th/early 20th centuries. From 3 to 3.46 feet below surface was a light brown silty clay grading into clay (Level C). No artifacts were recovered from this level. An auger test to 8.12 feet below surface showed no change in the soil.

The large amount of cultural material, especially ceramics and bottle glass, and the absence of building material in this unit would suggest a pre-demolition deposition of the material. In fact, the area was vacant by 1955, and so there should have been very little impact to this area when other locations were filled. The material, indicative of

routine household refuse disposal, could either have accumulated over a long period of time from local dumping or could have been brought in as fill to raise the grade. The latter possibility seems unlikely since most fill material located in other areas incorporates large amounts of either cinders or building material. The cultural deposits possibly originated from local dumping activity, but there is not enough data to confirm either this or the horizontal distribution of these deposits.

Test Unit 4 was placed at the south end of the block, adjacent to Trendley Avenue and about 100 feet west of Fourth Street (Figure 47). The test pit was located within five feet of a small (20 x 15 feet), 1-story frame stable depicted on the 1910 Sanborn Insurance map. By 1955 this area was vacant, with the nearest structure being a store located on the same block at the corner of Fourth and Trendley.

Unit 4 was excavated to a depth of 4 feet below surface and auger tested to a depth of 11 feet below surface. Level A extended from the surface to 3.4 feet below surface. It consisted of cinder and gravel grading into a very compacted loam and cinder deposit with a large quantity of artifactual material. The deposits in this level were so dense and compacted that they had to be loosened with a mattock. The artifactual material included ceramics (ironstone, whiteware, porcelain, stoneware, and yellowware), bottle glass, bone, window glass, and mortar. From 3.4 to 3.8 feet below surface was a light silt with mottled dark loam, clay, and coal (Level B). Bottle glass, window glass, bone, brick fragments, and nails were recovered from this level. From 3.8 to 4.0 feet below surface was a dark brown silty clay, coal, and cinder level that contained a pearlware sherd, bottle glass, bone, and nail fragments (Level C). The bottom of Unit 4 was augered 7 feet below the bottom of Level C. The auger test revealed light brown silt to a depth of 10 feet below surface, followed by silty clay.

The mixture of loam, silt, and cinders often occurred in striations or bands (Figure 50) that included predominantly household refuse, although some structural material was also found. This is a pattern that was found in both Units 2 and 4, and was similar to Unit 3 with the exclusion of cinders. Similar deposits at sites on Bloody Island would suggest an urban domestic dumping pattern that provided an outlet for daily produced coal stove wastes. These deposits then became the median in which trash and food remains were buried and later graded. Further excavation at this location would be necessary to determine definitely whether the deposits were indeed accumulated gradually through local dumping or were the result of a large layer of fill. In addition, an investigation to test the hypothesis of an urban coal stove waste/household refuse dumping pattern should be a research aim of future investigations.

Two backhoe trenches were placed at a limestone foundation on the north side of the block bounded by Main, Bond, Fourth, and Market Streets (Figure 48). The foundation is at the former location of a 2-story frame dwelling, 32 feet long by 22 feet wide, with a front porch and two rooms, one 20 feet by 11 feet and the other about 10 feet square, extending from the main structure at the rear. The rear rooms had gravel/tar paper composition roofs, the front porch had a metal roof, and the main structure had a wood shingle roof. A small frame building, 10 feet



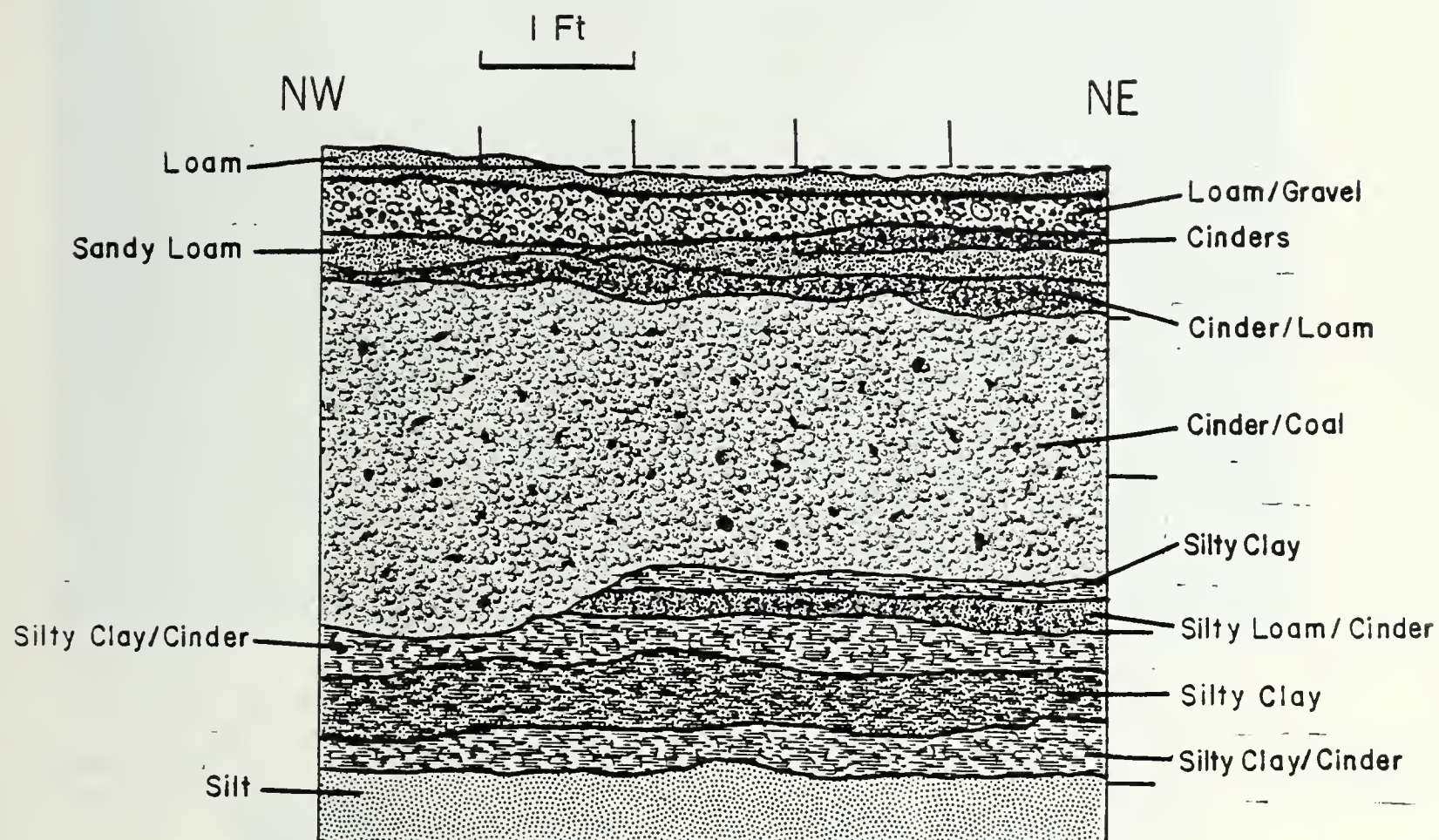


FIGURE 50. Illinoistown Testing Investigations, Test Unit 4, North Wall Profile.



by 15 feet, may have been a privy. A 1955 Sanborn Insurance map indicates that this location was, by that time, occupied by a 1-story frame structure, 32 by 22 feet, with an asphalt tile roof. The structure was still present on the 1959 aerial photographs, but was demolished during the mid-1960s.

Trench 1 was excavated to 6.6 feet below surface. Level A (0 to 2.3 feet below surface) consisted of demolition material from the mid-1960s. From 2.3 to 2.65 feet below surface was pale brown sandy silt with minor amounts of demolition material (Level B). Level C extended from 2.65 to 2.9 feet below surface, and consisted of sandy silt with ash and flecks of coal. Level D was a light brown silty clay that was found between 2.9 and 4.4 feet below surface. From 4.4 to 6 feet below surface was light brown silt with a small silty clay intrusion at 6 feet below surface (Level E). Below Level E was a pale brown silt that extended below the level of excavation.

The absence of any coal stove waste deposits, and the presence instead of the various levels of silt and silty clay above the bottom of the limestone foundation, is perplexing. Possibly the side yard was filled to the high grade with silt at some time in the past, or the trench excavation was actually conducted through several levels of undisturbed soil. Demolition and grading left a thin 2.5 foot layer of structural demolition material above the silt and silty clay ground surface. The absence of coal deposits is significant since it may mean that coal stove waste dumping was confined to back lot areas or possibly low areas within the lot. However, demolition and grading may have altered the top archaeological deposits in this area, so further investigation would be required to better understand the depositional history at this site.

Trench 2 was excavated to a depth of around 11 feet below surface. Level A extended from the surface to 3.4 feet below surface, and consisted of the usual demolition-related building material. This level extended to the bottom of the foundation on the inside of the structure. Whiteware and porcelain, as well as bottle glass, were recovered from this level.

The excavation of the basement floor to near the bottom of the footing was labelled Level B (Plate 69a). It extended from 3.4 to 3.8 feet below surface. The artifacts recovered from this level included an intact window pane, a ceramic planter, a button, electrical insulators, a milk glass lid liner, and bottle glass. The terminus post quem for these artifacts is 1954 to 1960. Between 3.5 and 3.8 feet below surface, just underneath the footing, a late 19th century bottle was recovered in situ (Plate 69b). The bottle, which was deposited probably during or just after construction of the foundation, was blown into a full-height cup bottom mold, and has a tooled lip, a ring-shaped glass pontil scar, and is embossed. One side states "M&W, ST. LOUIS, SUPERIOR SODA WATER," and the other side reads "MCCLLOUD & WHEATON, DRUGGISTS & CHEMISTS." Based on a combination of technological and stylistic elements, the date of manufacture for this bottle has been narrowed to between 1870 and 1875. An archival search for lists of 19th century St. Louis manufacturers may narrow the date even further. Since beverage bottles are generally deposited soon after purchase and consumption (Adams 1977:229), this



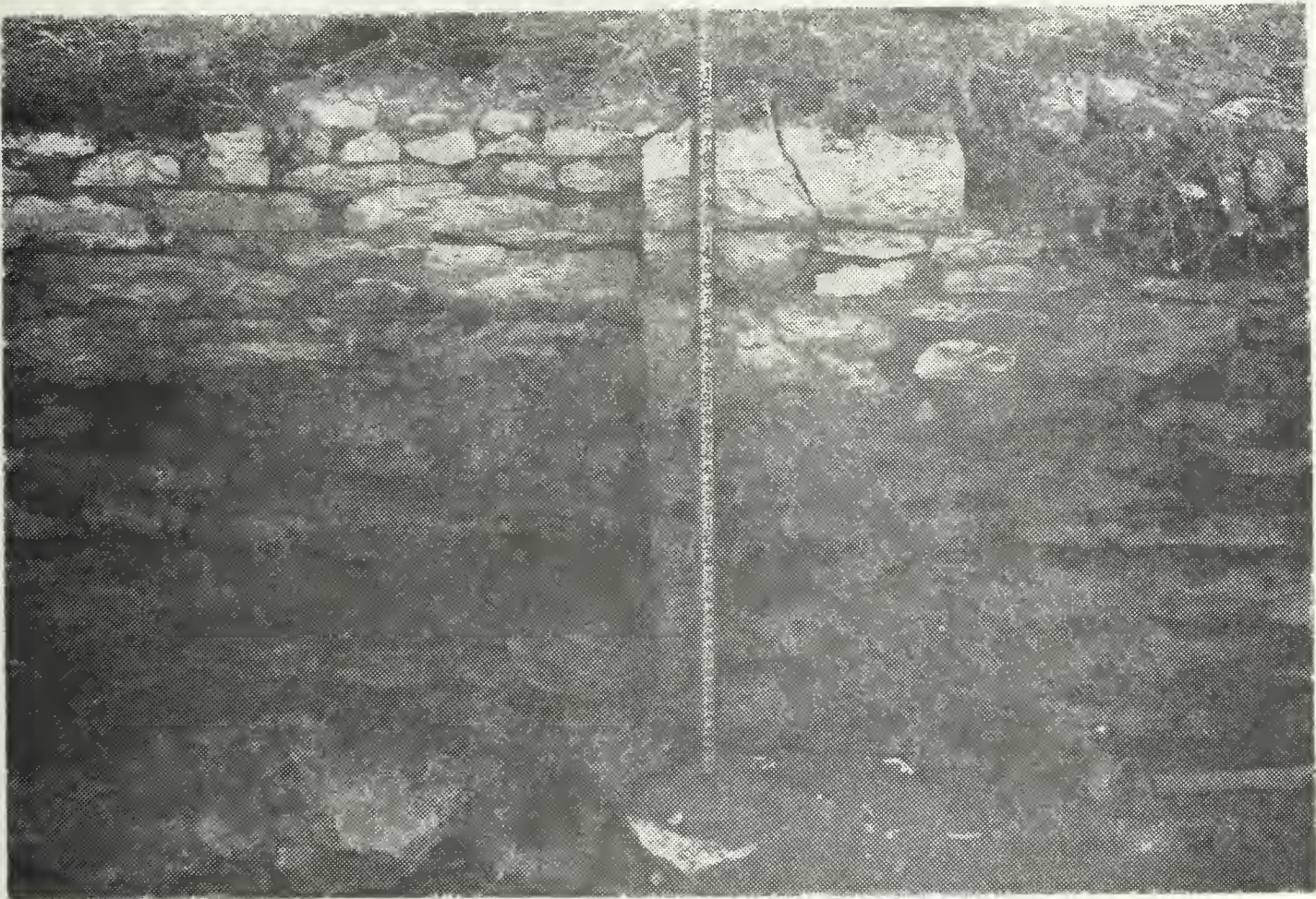


PLATE 69. A. Illinoistown Testing Investigations, Backhoe Trench 2, Showing Exposed Foundation and Footing.

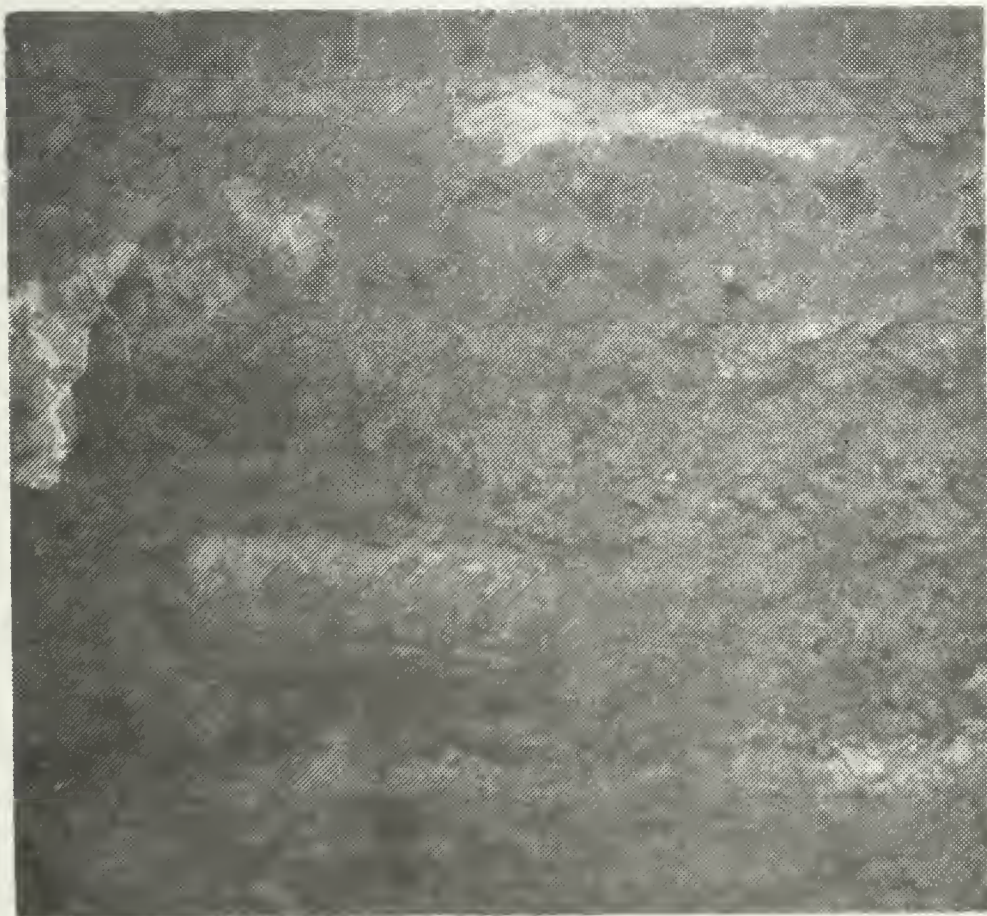


PLATE 69. B. Illinoistown Testing Investigations, Backhoe Trench 2, Bottle Found In Situ Below Footing.



artifact is probably a sensitive indicator of the date of construction for this foundation. The bottle was recovered from a brown loamy clay beneath the footing. Above the loamy clay and overlying the footing was yellow clay, which interfaced with the demolition material.

At 3.8 feet below surface was a lens of sand and plaster that may have marked the construction level for the structure (Level C). Below the sand and plaster lens was a sloping grayish-brown clay layer that extended to a depth of 4.4 to 5.1 feet below surface from north to south (Level D). From this sterile level to 11 feet below surface was sandy silt with interbedded lenses of yellow clay. Excavation was halted at 11 feet below surface.

All of the artifacts from beneath the foundation were recovered from the sand and plaster lens. The assemblage included bone, coal, bottle glass, a spoon, earthenware, porcelain, ironstone, and some personal objects, such as buttons, shoe leather, a glass bead, and a key. The plaster and sand deposits marked the bottom of the basement. The grayish-brown clay was either the original surface of the natural soil deposits, or was introduced as fill to cover the silt deposits. Silt was the usual ground surface at Illinoistown, but in this case the silt sloped naturally from north to south about 15 degrees, whereas the grayish-brown clay was the first layer that was level with the foundation.

The use of the basement during occupation of the structure cannot be determined confidently from the test trenching alone. Presumably, the lack of a wood or brick floor would indicate that the basement was not a residential level. The height of the foundation was only about 5 feet above the basement floor, which would have restricted the probable use of the basement even further. A ceramic sewer pipe and metal pipe (Plate 69a) would indicate that the basement space served as a receptacle for utilities. Given the apparent lack of extensive use, the artifact record, consisting of miscellaneous personal objects, ceramics, and bottle glass, may have originated as artifact loss through openings in the first floor. Further investigation would be necessary to accurately determine the function of the basement and the origin of the basement deposits. Interpretation of the artifactual data suggests that the material is definitely pre-demolition, and was deposited during residence of the house.

Two 5-foot square test units and two test trenches were placed in the third block south of the corner of Trendley Avenue and Fourth Street (Figure 49). The elevation here was lower than in the other blocks, and sloped gradually from Trendley southwest towards the Illinoistown Roundhouse. Test Unit 5 is located on the southeastern side of the block near the rear of the shotgun house shown in Plate 67b. The ground surface is about 4 feet below the road datum. The depositional record of Unit 5 consisted of yellowish-brown silt loam with ash and charcoal from 0 to .75 feet below surface (Levels A,B). Cultural material was abundant, consisting of ceramics, bottle glass, nails, hardware, general post-1950s trash, and a 1967 U.S. penny. Beneath this level was 3.3 feet of dark silty sand with lenses of ash and cinders and mixed with cultural material, including ceramics, bottle glass, window glass, and bone (Level C) (Figure 5!). Maker's marks, stylistic markers, and other temporally sensitive artifacts



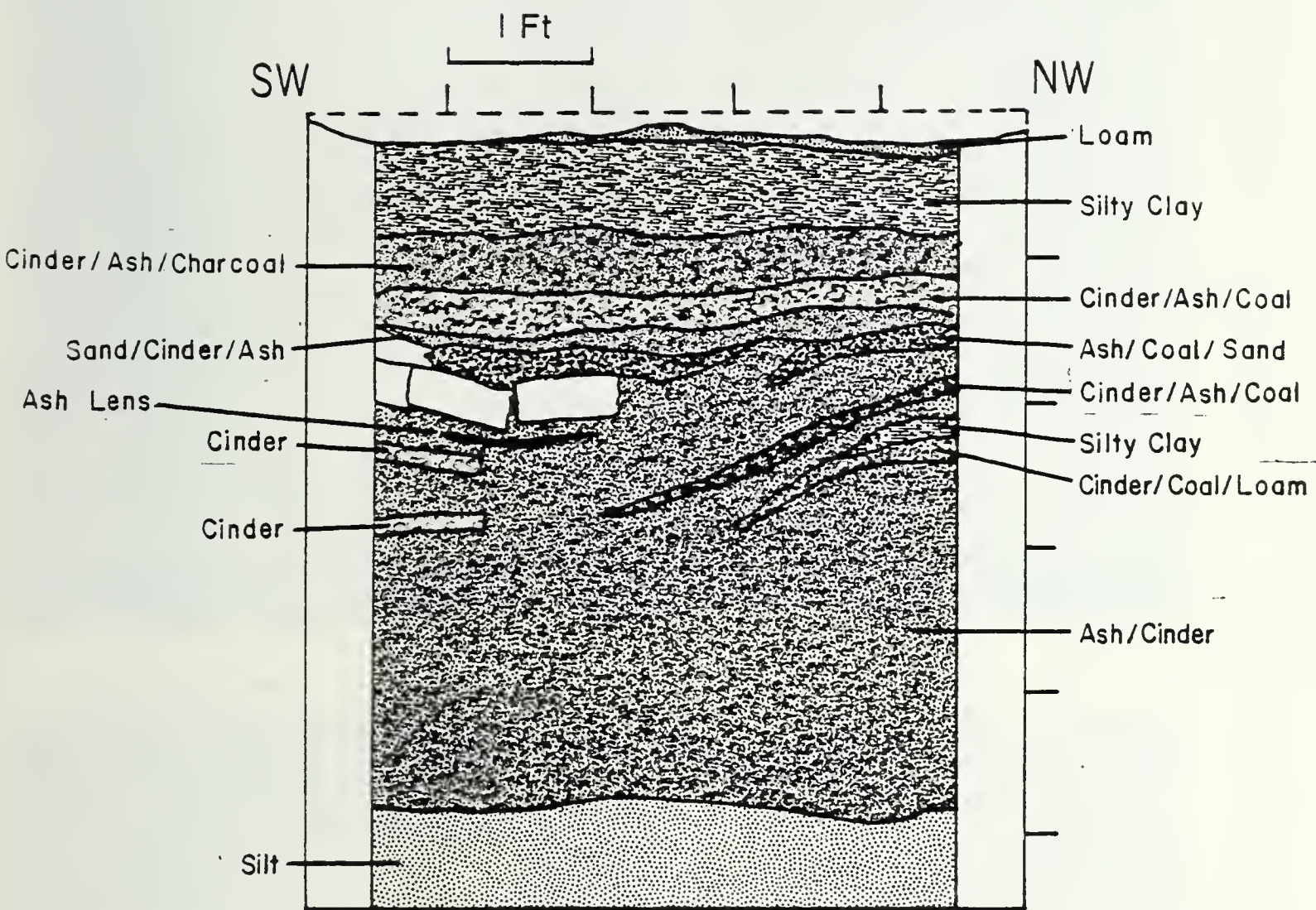


FIGURE 51. Illinoistown Testing Investigations, Test Unit 5, West Wall Profile.



indicate a wide span of deposition for this level, extending from at least 1887 to the present. Unfortunately, these deposits were taken out as one fill unit rather than distinct, compacted, coal waste/domestic refuse dumping levels, since they were discovered in profile. However, the deposits are identical to other back yard deposits in East St. Louis in the composition of their cinder and coal deposits and artifact assemblages.

Unit 6 was placed in the back yard of the boarding house at the corner of the block (Plate 67a), about 10 feet southwest of a back entrance (Figure 49). The deposits consisted of mainly coal, cinder, and artifacts mixed with silt to a depth of one foot below surface (Level A). This was underlain by a layer of brown clay and building material (Level B), and below that a layer of silty brown clay with no building material (Level C). At 2.3 feet below surface was silt with charcoal flecks that graded into silt at 3 feet below surface (Level D). An auger test to a depth of 9 feet below surface revealed that the silt was the natural break, with the culturally sterile soil extending to an unknown depth below 9 feet.

Cultural material in the coal and cinder levels above 3 feet below surface included ceramics, bottle glass, window glass, nails, bone, and other general household refuse dating from 1967 to before 1917 (Appendix A). The yellowish-brown silty clay level below 3 feet had a smaller proportion of ceramics, bottle glass, window glass, and other artifacts, and a few cinder remains.

Unit 6 was a relatively shallow coal waste deposit overlying silty clay with artifacts and building material, and the alluvially deposited silt that was the original ground surface. This shallow coal waste deposit poses the question of localized dumping patterns, since it appears that the thickness of the coal waste deposits was related to the original ground topography. Low areas generally received the earliest and most accumulation of deposits so that a trend toward lot levelling was obtained. Further investigation will be necessary to illuminate the urban lot pattern of dumping in Illinoistown before these interpretations can be quantitatively confirmed.

A backhoe trench (Trench 3) was excavated at the southwest corner of the block parallel to Fourth Street (Figure 49). The 50-foot trench excavation cut through the brick foundation walls of a structure and provided information on not only the basement deposits, but the basement floor and alluvial deposition underneath the floor (Plate 70a). Inside the foundation from the ground surface to a depth of 2.8 to 3.6 feet below surface was dark loam, ash, and cinder with building material and ceramics. Below that was yellow clayey silt that graded into clean silty sand at 3.6 feet below surface. Outside of the foundation walls, the deposits consisted of dark loam and cinders with cultural material from ground surface to 1.4 feet below surface. This was underlain by yellow clayey silt and silty sand. The foundation was mortared brick, two courses wide. Midway between the outside walls was a brick footer. The foundation walls and the footer were one foot wide and 1.2 feet high.





PLATE 70. A. Illinoistown Testing Excavations,  
Backhoe Trench 3, Showing Exposed Foundations.

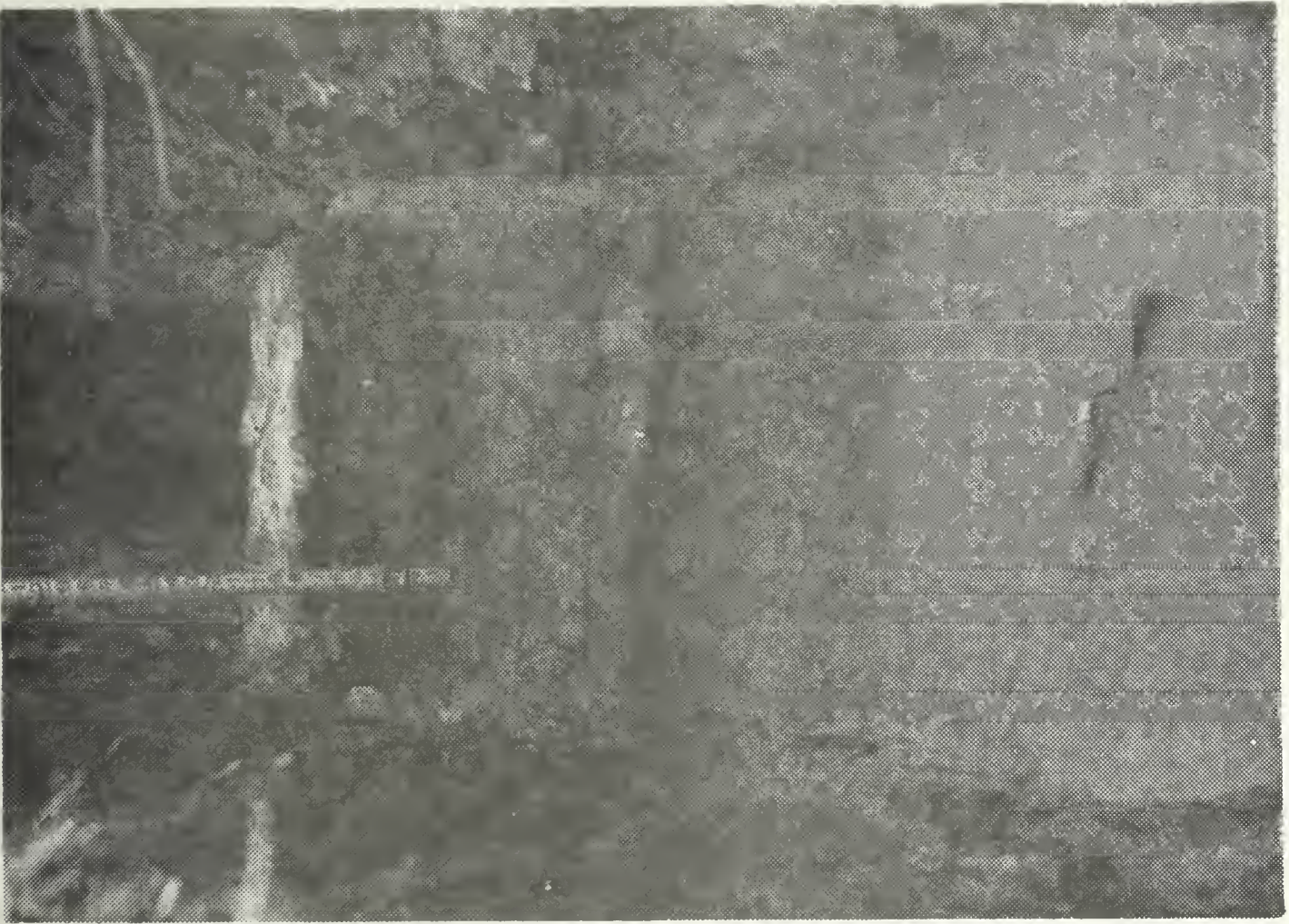


PLATE 70. B. Illinoistown Testing Excavations,  
Backhoe Trench 3, Showing Alluvially Deposited  
Silt.



The yellow silty sand extended above the top of the foundation at 1.4 feet below surface, indicating that the foundation had been cut off more than 2.5 feet from the top during demolition. The actual height of the foundation and basement cannot be determined from the available data.

The singular most outstanding characteristic about the artifacts recovered from the basement fill was the large number of institutional ironstone ceramics and bottle glass. Local informants report that a cafeteria serving the Illinoistown Roundhouse once stood on or near the site. However, an examination of the 1910 Sanborn Insurance map shows a narrow shotgun house, 15 feet wide and 45 feet long with a shingle roof, among several small dwellings at this end of the block. The cultural material could have been dumped into the basement of the house following demolition in the 1960s. The institutional ceramics, mostly soft porcelain, and the large amounts of bottle glass do suggest a restaurant origin. However, other artifacts, including bed springs, a rubber mat, hypodermic needles and vials, etc., indicate non-specific dumping. If the open basement provided a receptacle for trash disposal over several years, the deposits could have originated from many different dumping episodes and sources of trash. The range of artifacts in the basement indicates use during the early to mid-20th century.

The deposits below the foundation floor are interesting as well. A close examination of the detail of the trench in Plate 70b shows patterns of swirls and striations in the alluvial sandy silt. The patterns, which appear to have been related to the deposition of the silt, are a function of the mechanics of alluvial deposition in an area that is frequently flooded. The close proximity of Cahokia Creek just 200 feet west (see Figure 37) would suggest that it played a major role in the accumulation of these deposits. The deposits are diagonally bedded, sloping downward to the creek, and seem to have resulted from the trend of alluvial accumulation of deposits east of the creek as it was cutting into the west side (a kind of point bar accretion pattern not unusual in this kind of hydrological situation).

A 40-foot long test trench (Trench 4) was placed on the northeast side of the block parallel to Trendley Avenue. The trench bisected three limestone foundation walls, including one complete structure that served as a two-story dwelling and tin shop, and the east wall of a store, both located on the 1910 Sanborn Insurance map. All three foundation walls were mortared ashlar limestone, 1.3 feet wide and extending to a depth of 4.1 feet below surface.

The top deposit was clayey loam .8 feet thick (Level A), underlain by demolition material 1.3 feet thick (Level B). The demolition material consisted of small amounts of building material and an abundance of 20th century ceramics and bottle glass. Below the demolition level was red cinder that extended from 2 feet below surface to 5 feet below surface in some places (Level C). The top of the cinder layer was levelled, and a lens of plaster .2 feet thick lay between the demolition material and the cinder. The foundation was intrusive into the cinder, which extended a foot below the deepest foundation. The bottom of the cinder level was uneven where it lay on mottled brown clay, probably the pre-construction ground surface. It would appear that the location had been used for the



dumping of industrial waste prior to settlement. Artifacts recovered in the red cinder were from a wide temporal range that spanned the period from the mid-19th century to the Depression (ca. 1930). Possibly this area served as a convenient trash dump for the mid- to late 19th century residents of Illinoistown as well as an industrial cinder dump until the location was occupied in the late 19th or early 20th century. The post-19th century artifacts must have been deposited after abandonment or demolition of the structure, leaving the foundation open for later trash disposal. The red cinder was located within the basement, under the foundation, and outside the southeast wall of the structure. Beneath the red cinder was clay mottled with brown loam that graded into clayey silt at 6 feet below surface (Level D). Very little cultural material was recovered in the mottled clay and none in the clayey silt.

The testing at Illinoistown revealed a situation of deep foundations buried under mid-20th century demolition with deposits of coal waste and household refuse in the yard areas. Foundation preparation for the structures seems to have varied depending on the elevation, with tall foundations necessary to raise the first floor above grade being the rule. In most cases the foundations were constructed on top of the alluvially deposited silty sand ground surface, 3 to 6 feet below present surface. Coal waste deposits ranged in depth from 1 to 3.5 feet thick, and seemed to be deposited with the concern for raising low areas and levelling the lot, although this is a very tentative conclusion based on limited investigation. Demolition of structures resulted in the filling of the basement to ground surface with the smaller building material remains. Some local dumping may have occurred inside of foundations left open for a period of time.

The data generated by the testing has allowed only an exploratory examination of the archaeological deposits associated with the original site of Illinoistown. In addition, the material recovered is primarily post-19th century. Information from the early to mid-19th century components was not recovered. This was the case because of limited time and the constraints of dealing with the very visible late 19th and 20th century deposits that cover the entire area. Even these tests were not intensive enough in one area to allow for a meaningful evaluation of site components, which will require systematic study on the individual structure level rather than lot or block analysis before they are fully understood. Deep testing in the area of Market and Main Streets may provide data from the early 19th century components if they have not been impacted by later construction. The tests at Illinoistown were extensive enough to determine that coal waste dumping and trash disposal was occurring here as at the other domestic sites, and careful investigation of these deposits may provide valuable insights to urban land use, disposal patterns, material culture, subsistence practices, and other questions. The site of Illinoistown has cultural deposits that appear to be eligible for nomination to the National Register of Historic Places. Further archaeological excavation coupled with an archival study and oral history program will be necessary to complete the investigations at Illinoistown. The plan for additional work at Illinoistown will be included in the Summary and Recommendations chapter.



## KERR ISLAND

Kerr Island is located near the riverfront in Madison County between the Merchants and McKinley Bridges (Figure 1). Encompassing a total area of less than 20 acres, Kerr Island is a largely abandoned tract of land thickly vegetated in secondary growth, with less than a dozen structures still inhabited. Once an overflowing community of southern blacks from World War I to the 1950s, and before that, the commercial center of the ferry landing that succeeded Brooklyn in the late 1840s, Kerr Island has been neglected and under-used in the last decade.

The earliest documented use of the area dates to the second decade of the 19th century. In 1815 John Anthony established a rental service of flat-bottomed skiffs for travelers to St. Louis. Anthony built the first 1-room log house in the area to provide lodging and meals to travelers. In the 1820s, Matthew Kerr, a St. Louis merchant, began a horse-powered ferry. The ferryboat, the Brooklyn, docked south of Kerr Island near the present-day city of Brooklyn.

In the 1830s the bank of the Mississippi River was much further east than it is now, located approximately at a diagonal from southeast to northwest across the island. Kerr Slough, a large creek, had its confluence with the river south of the McKinley Bridge, and flowed approximately 170 feet west of Main Street (State Route 3), forming the eastern boundary of Kerr Island. The St. Louis harbor improvements of 1838 to 1851 diverted the river west of Bloody Island, and caused increased siltation in front of Kerr Island. The city of Brooklyn, located .4 miles south of Kerr Island, protested that the river channel alterations impacted its ferry-associated commercial interests, and filed for an injunction, but in vain. The ferry company received \$1600 in settlement, which they used to construct a bridge across Kerr Slough. The ferry company and the early town of Venice were eventually re-established on the island.

The principal street and commercial center of old Venice that extended across the Kerr Slough Bridge was the National Way, a 100-foot wide street leading to the ferry landing. Two hotels, two livery stables, three general stores, and two blacksmith shops were established on either side of the National Way during the migration boom of the 1840s. Floods in 1844 and 1851, however, devastated the town, and washed away the bridge and part of the island. After 1851 most of the business interests relocated east of Kerr Slough, though old Venice was utilized for many years as a collection center for passengers, stock, wagon freight, and grain awaiting transport across the river on the Madison Ferry.

Towards the end of the 19th century, the construction of the two northern bridges to St. Louis (Merchants Bridge for rail traffic and the McKinley Bridge for wagons and pedestrian traffic), the decline of the ferry as a prime factor in commercial transportation, and the development of a manufacturing and commercial base shifted use away from Kerr Island. By the early 20th century, Kerr Island seems to have been almost completely abandoned. The 1909 map of the east side shows little commercial activity and no significant residential use.



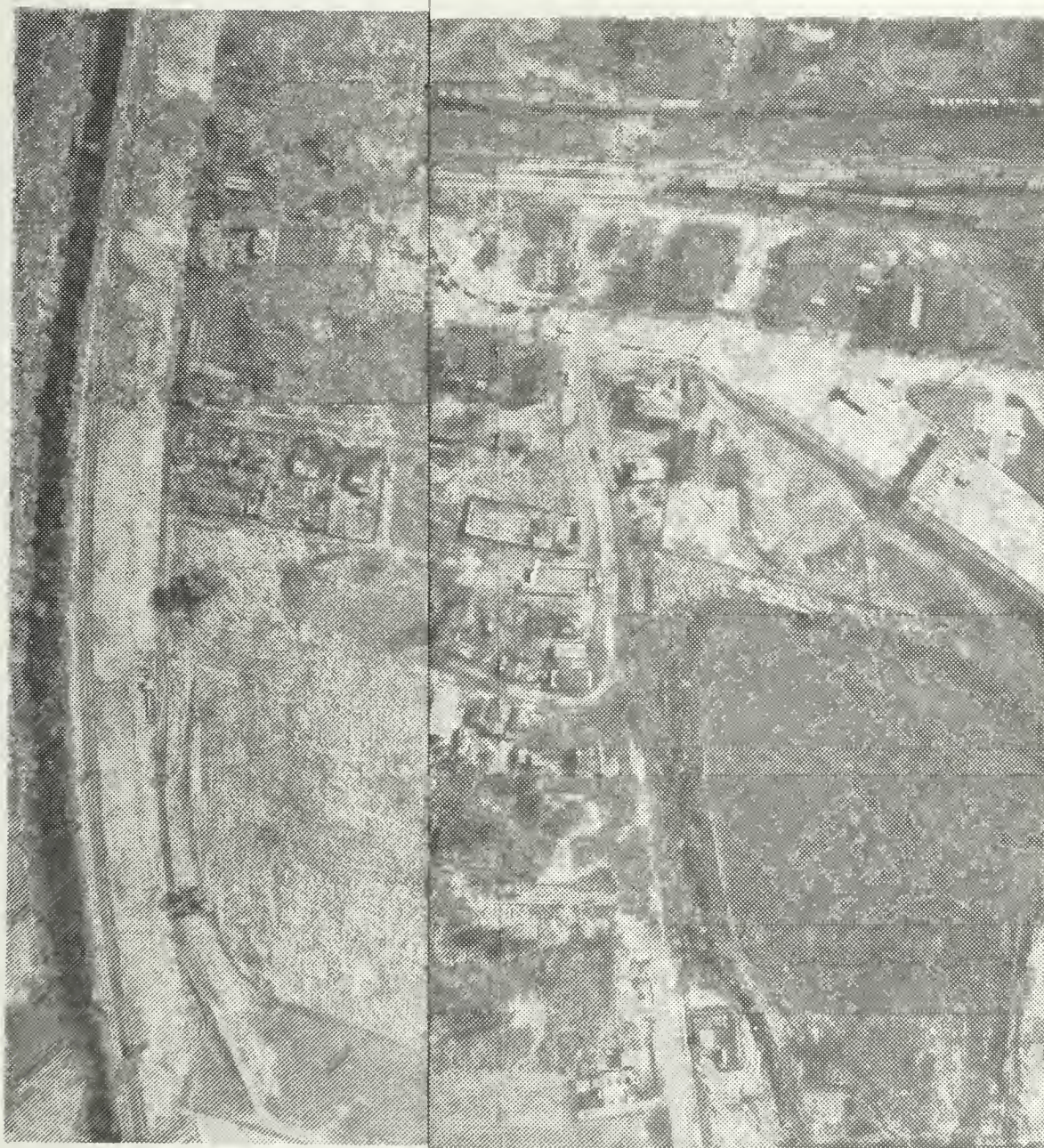


PLATE 71. Aerial View of





PLATE 71. Aerial View of the Kerr Island Settlement in 1964. East is at the Upper Margin of the Photograph.



By the beginning of World War I, however, industrial output increased in the area and large numbers of migrants filled the cities on the east side. Kerr Island became the site of a vibrant black community made up of predominantly locally crafted residential housing, churches, a school, and small businesses. An examination of aerial photographs of the site indicate full settlement from the McKinley Bridge approach to about halfway up the island, where settlement diverged into two legs leaving a large vacant landholding in the northern center of the island. In the late 1930s Union Electric bought a large tract of land at the southern end of the island for construction of a power plant. This necessitated the relocation of a large part of the residential settlement. Many of the structures were moved, probably to the northern part of Kerr Island where the large "V" between the two legs of settlement was uninhabited. By the 1950s the entire island had been subdivided into a collection of lots, with frame structures and outbuildings, on a sinuous dirt road system. Also by this time, Kerr Slough had been completely filled with cinders by the Union Electric power plant. A few years later, a large area of the settlement was again taken away by the improvements of State Route 3 at the eastern side of the island (Plate 71).

The combination of a damaging fire, industrial incorporation of island property, decline of the economic industrial base of the area, and a shift to an owner residential system from a rental system contributed to the decline of the island settlement. Changes over the entire east side urban complex, consisting of a steady erosion of the business foundation, residential migration to the suburbs and other cities, and physical deterioration of the city probably figured prominently in changes in the island's status. Today, Kerr Island is a small collection of frame houses and abandoned buildings in a thickly vegetated tract of land bounded by the levee, Merchants Bridge, State Route 3, and the Union Electric power plant (Plate 72a).

Interviews with local residents indicate that many of the settlers of Kerr Island were rural blacks from the South seeking employment in the industrial and manufacturing businesses of the east side. The process of settlement on Kerr Island involved paying an annual fee of \$1.00 and staking out a lot. Once the location for the lot was chosen by the new resident, the boundaries were often marked with a picket or wire fence. Houses and outbuildings were usually constructed by the renter or a local builder on the island of salvaged materials, often the remains of old railroad boxcars. The predominant architectural design was the wooden frame shotgun house, though other variants were also present. Houses were built on stone or brick piers, with asphalt tile siding and roofing. Outbuildings included privies, garages, and sheds for the farm animals that often provided the economic base for the family. However, the predominant source of employment for Kerr Island residents was the local industries.

Kerr Island provides an interesting contrast to Illinoistown and National City, both of which were planned and administrated settlements. The island, on the other hand, appears to have developed with a minimum of outside control. Certainly, Kerr Island had many levels of community interaction in terms of social, religious, and economic relationships



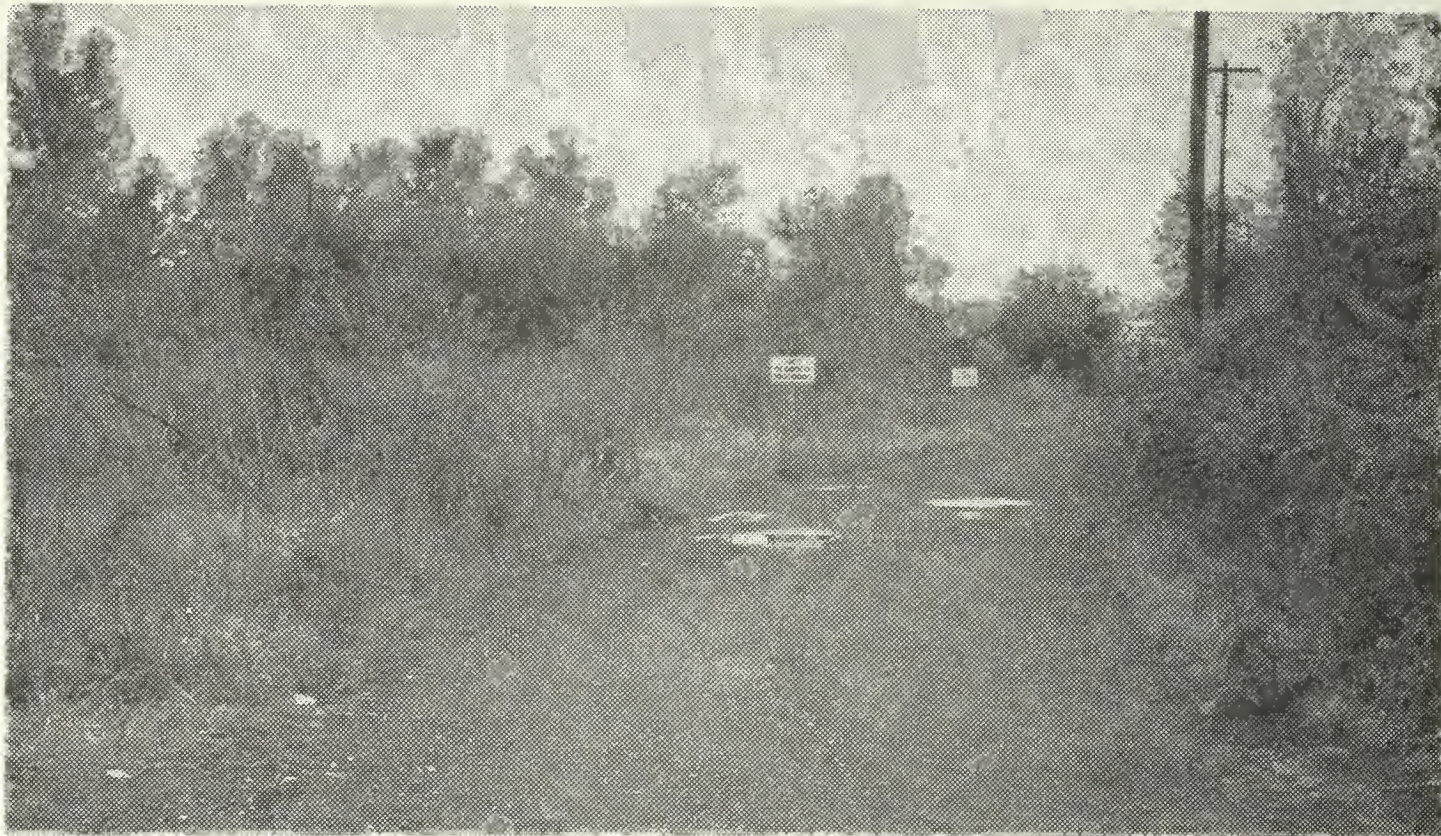


PLATE 72. A. View of Kerr Island as it Appears Today.



PLATE 72. B. Abandoned House Surrounded by Thick Vegetation at Kerr Island.



between the residents, as well as familial ties, which were perhaps the strongest and most important factors in the organization of the island residents. However, a full understanding of these above-mentioned levels of organization, as well as the nature of the community-level policy-making process is not presently available.

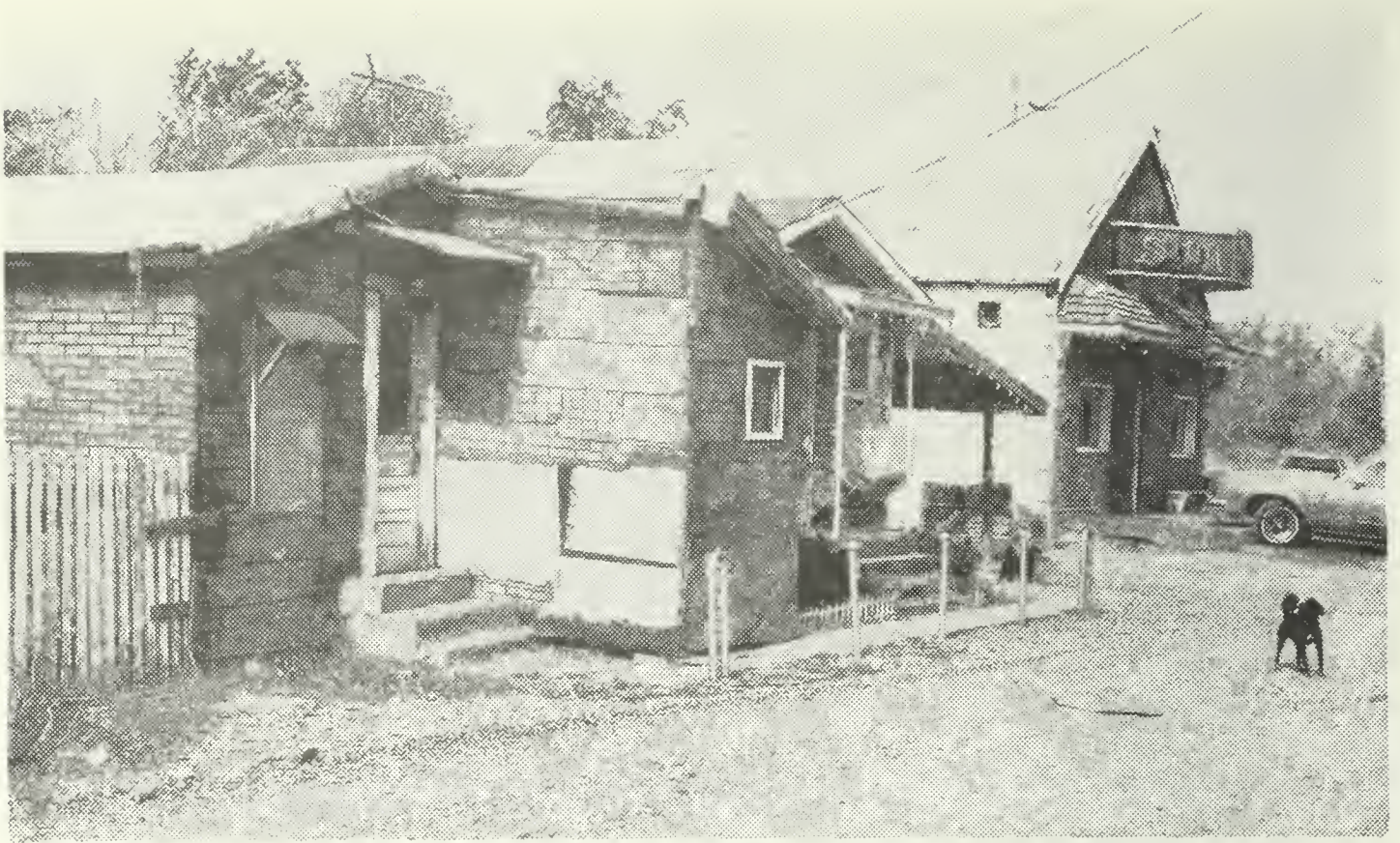
The shantytown phenomenon is not well documented or understood, but most researchers will agree that these communities were an important part of the history of industrialization and the development of urban centers in the United States. As important parts of the American heritage, shantytowns have all too often been overgeneralized or ignored through a combined ignorance of their significance and embarrassment over the human suffering and squalor within the city. A recent article by Martin Towey about the St. Louis counterpart of Kerr Island, called Hooverville, is an exceptional example of the rich and dynamic social and economic undercurrents within the community, and the adaptability and self-reliance of groups of people who found themselves at the bottom of the economic system. Towey's research, which utilized oral history, newspaper articles, and historic photographs, revealed that Hooverville was an assemblage of mixed ethnic groups (black, native white, and European immigrants) who were mostly transplants from the St. Louis urban area, in contrast to Kerr Island, which was apparently composed of immigrant rural blacks. Towey's study also revealed an economic livelihood focused on the recycling of discarded items and a barter system whereby commodities and skills were exchanged without involving currency (Towey 1980:4-11).

The shantytown residents survived the hard Depression years through employment in local industry, family crafts, subsistence farming, barter, salvaging discarded food and building materials, and donations from local civic, business, and religious organizations. These settlements were not without their own power in the city, however. These densely settled enclaves wielded decisive influence in local politics, and apparently used this power in gaining concessions and favors from politicians concerning services like water resources, police and fire protection, and road improvements. Inherent in a system of political interdependency with city hall would probably be a community level of political organization along the lines of the city ward hierarchy system that evolved, in most cases, with boss politics in the city.

#### ARCHITECTURAL DOCUMENTATION OF KERR ISLAND

The existing architecture at Kerr Island probably provides a good indication of how the entire black settlement must have appeared at the height of its occupation. The significance of the remaining structures (a church, a tavern, a store, ten houses, and assorted outbuildings) lies in the fact that they all represent examples of "modern" (post-1900) vernacular architecture and the primary use of salvaged materials. Many of the structures, of which several appear to be variants of the "shotgun" style that typifies rural southern black architecture, are now in delapidated condition and are abandoned (Plate 72b), although it appears that at least five of the houses are still inhabited and the tavern continued to do a brisk business (Plate 73a).





**PLATE 73. A. Modern Streetscape of Kerr Island, Showing Inhabited Houses and the Tavern (to the Right of the Photograph).**



**PLATE 73. B. Church at Kerr Island, Now Abandoned.**



The existing church, although now abandoned, is probably the most substantial structure still standing in the community (Plate 73b). It is 2-1/2 stories high, with the lower two stories built of concrete blocks and the upper 1/2-story built of frame and asbestos shingles. The roof is a medium gable, with a cross gable in the rear. A gabled, square tower probably housed the church bell. One door enters into the tower at ground level, but the main entrance is at the second story, and is reached by a flight of concrete stairs. The entrance hall is also built of wood and asbestos shingles. The church is now boarded up and is in a state of disrepair, but it is the only one standing of several known churches that originally served this community.

The store, which was known as the "Island Food Center," is also in a state of abandonment. This 1-story, gable-roofed frame building also sports asbestos siding, a striped metal awning over the entrance, and a sign that is flanked by two large replicas of a Pepsi-Cola cap (Plate 74a). It can be assumed that this, too, was only one of several stores that served the Kerr Island community. The buildings on Kerr Island are interesting remnants of the once vibrant shantytown. Though no single structure is eligible for nomination to the National Register of Historic Places architecturally, more complete documentation of the architectural elements through aerial photos, historic photos, archival research, and oral history studies is recommended for complete documentation of Kerr Island.

#### ARCHAEOLOGICAL INVESTIGATION AT KERR ISLAND

Archaeological testing at Kerr Island was carried out to examine the nature of the archaeological deposits, and to evaluate their potential for contributing to an understanding of significant aspects of the island's historic use. At the time of the Phase II investigations, the 19th century use of the island had not come to light from the archival research, and excavation was focused on the 20th century black shantytown component.

Inspection of the area revealed that out of the over 200 houses on the island in the 1950s, less than a dozen are still standing, and perhaps only half of those are still inhabited. Fire, demolition, and recent dumping activity has, in many cases, impacted the foundations and other cultural remains of those areas previously occupied by structures. While some of these lots appear to have good potential for intact subsurface remains, others have probably been completely impacted by these forces. Because of the varying levels of preservation at Kerr Island, an objective of the testing was to obtain an evaluation of the significance for the range of site deposits and to determine the location and extent of the most potentially important areas of the settlement. The investigation of the site was conducted within the guidelines of a research design in order to provide a direction and focus to the archaeological investigation of the diverse and extensive cultural deposits.

#### Research Design

The research design was oriented towards a broad study of residential lot use, with the objectives being to examine spatial design of lots and the archaeological remains of human activity in lot areas resulting from



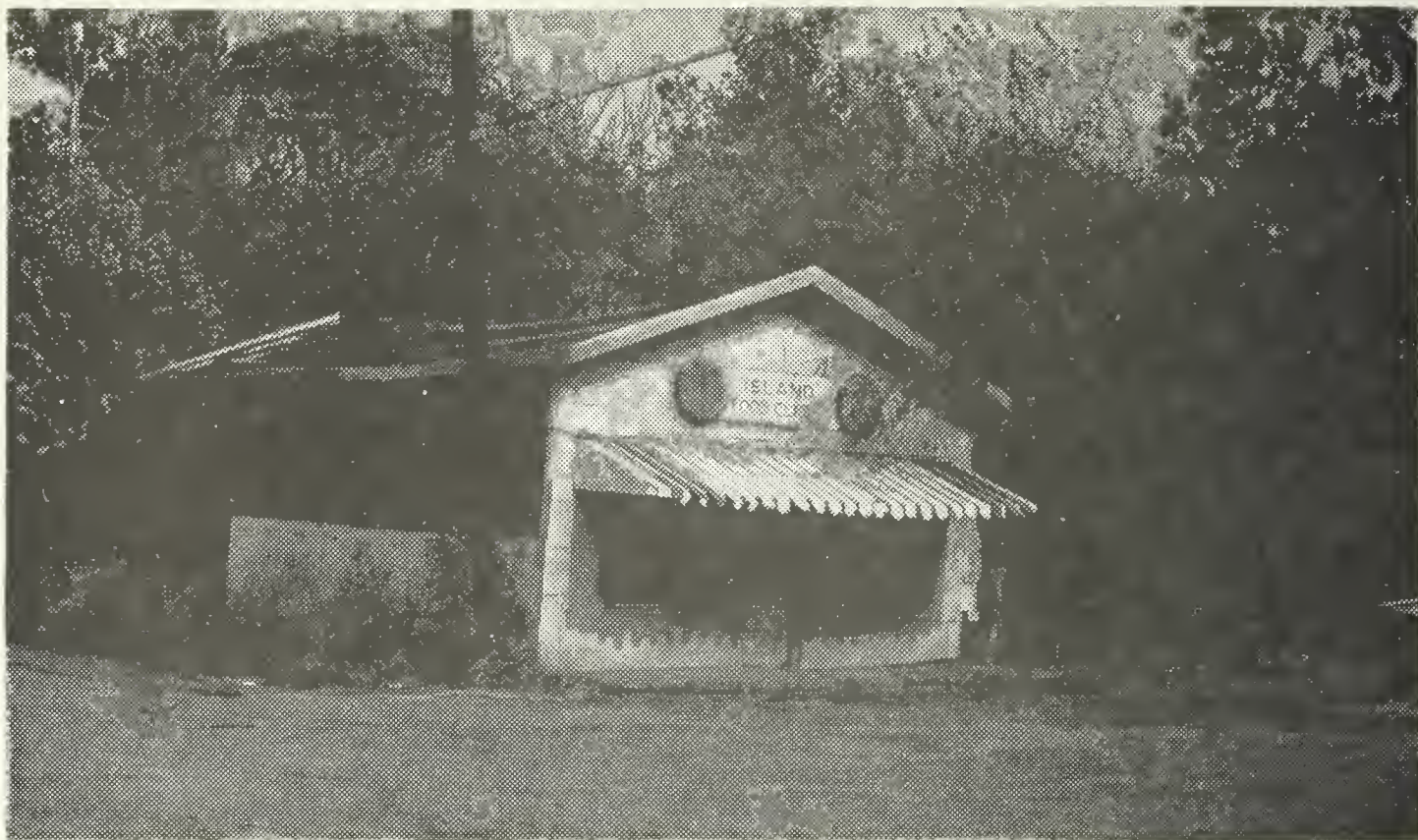


PLATE 74. A. The Island Food Center, Now Abandoned.



PLATE 74. B. Kerr Island Testing Investigations, Test Unit 4, Showing Exposed Brick Pier.



landscaping, gardening, animal husbandry, local craft use, refuse disposal, and other cultural processes. The investigation was designed to examine the cultural deposits on the premise that these human activities do indeed leave their mark on the archaeological record, and can be understood through intra- and inter-site functional analyses of cultural material. A short discussion of the residential lots at Kerr Island based on preliminary oral history and archival studies will provide the necessary background for the research design to be examined by the study.

The earliest documented evidence of the Kerr Island community is a 1928 aerial photograph that shows a system of lots marked by fences, each enclosing a main structure and associated outbuildings. There were over 100 houses on the island at this time, and though there was a large uninhabited area at the north end of the island, the lots were all clustered at the south end and along two arms of settlement extending from the main area of settlement on both sides of the undeveloped tract of land. This uninhabited tract of land appears to have sectioned off into lots that were occupied by orchards and fields.

The lots on the 1928 map were of varying dimensions, but generally averaged around 40 to 50 feet wide by 80 to 100 feet deep. The main houses, all frame and usually shotgun style, were located very near the road, allowing for a shallow front yard less than 15 feet deep, and a long back yard area. Naturally, then, the back yard was the area of highest use. It appears that back yard gardening was the most common use for this area, as well as the ever-present privy and other outbuildings.

With time, many of the front yards became shaded by trees. The front side of the house was also the location for a porch, and it is here that family members escaped the confines of the house and much of the social interaction with neighbors took place. With the increase in the number of garages as a result of the emphasis on automobile transportation, and a decrease in the number of privies following the popularity of indoor bathrooms, the lot design appears changed in the 1964 aerial photograph (Plate 71). Some lots had been subdivided for additional housing during the peak of population, thus losing the large back yard. In lots that still had back yards, garden plots were the most popular use of the area, though some back yards appear to have been used as parking places for cars. However, also notable in this view of the island was the occurrence of a large number of gardens in former residential lots that had been abandoned and the structures demolished or removed. If the residents of Kerr Island were absorbing property for agricultural use during the decline of population after the 1950s, then this might account for the non-agricultural use of back yards.

The one element of the Kerr Island lot design that carried over from the earliest use of the island to the present was the use of fences to denote ownership, to keep out garden pests, to keep in animals and children, and to compartmentalize different areas of the back yard for special use. The agricultural purpose of the fences is easy to understand, and the need to protect gardens and orchards and enclose farm animals in such a compacted, yet rural-oriented, community is reason enough for the compartmentalized lot design. However, the fences would seem to have functioned also



in a social or ideological context. The seeming redundancy of some of the fences (Plate 71) that delineate property lines, but do not appear to enclose land for agricultural purposes, and the occurrence of divisions within compartments, would suggest that fences were used to provide a distinction between property holdings, to delineate the individual control of a family, to define specific-use areas within a lot, and as an answer, albeit a symbolic one, to the problem of privacy in such a densely settled area.

The family lot was the most basic level of organization in the Kerr Island community. The lot, which was usually defined by the picket or wire fence was divided into special-use areas relating to the housing of animals, gardens, yards, orchards, parking areas, etc. Archaeological investigation within the lots was designed to locate and examine cultural deposits for intra-lot use and the cultural processes ongoing within the lot design. For purposes of this study the following divisions or areas of the lot constituted the analysis categories to be examined: the front door area, the backdoor area, the back lot, the side lot, the front lot, inside the porch, and inside the structure. The following discussion of the archaeological testing at Kerr Island will be organized by lot. The discussion of test areas will proceed from south to north with lots designation does not correspond to any official legal system, but is merely used for convenience. The site testing location map (Figure 52) does not show the configuration of lots, though comparison with Plate 71 will permit the reader to follow the general boundaries of these lots as they are described below.

#### Lots 1 and 2

These two lots are visible on the 1964 aerial photograph (Plate 71) as the two lots facing north at the bottom right-hand corner of the photograph. The structure on Lot 1 has a concrete square foundation located on the inside of the southern and eastern walls of the L-shaped house. The rectangular concrete slab appears to have been part of a walkway from the front door. Figure 53 depicts a detailed testing plan for Lots 1 and 2. At the bottom of the map is Lot 1, bounded on the east side by a barbed wire fence. The west side lot boundary is located parallel to the east boundary at the turning point of the southern fence line. Poured concrete slabs, a brick pile, and a shallow depression were all that marked the location of the house. Test Unit 1 was placed in the back yard of the house and Test Unit 2 was placed near the northwest corner of the house in the front yard.

Lot 2 is located west of Lot 1; on the aerial photograph Lot 2 is shown below Lot 1 (Plate 71). The house was a rectangular frame house with a front porch facing north. The 3-hole cinderblock foundation of this structure was recorded during the Phase II archaeological testing (Figure 53, top). Test Unit 3 was placed at the rear of the structure and Test Unit 4 was located in the location of the front porch.

A controlled surface collection was made of Lots 1 and 2. The two lots were divided into six sections: a dump along the eastern fence line boundary of Lot 1, in the side yard of Lot 1, 2 sections in the back yard of Lot 1, one section in the back yard of Lot 2, and one encompassing



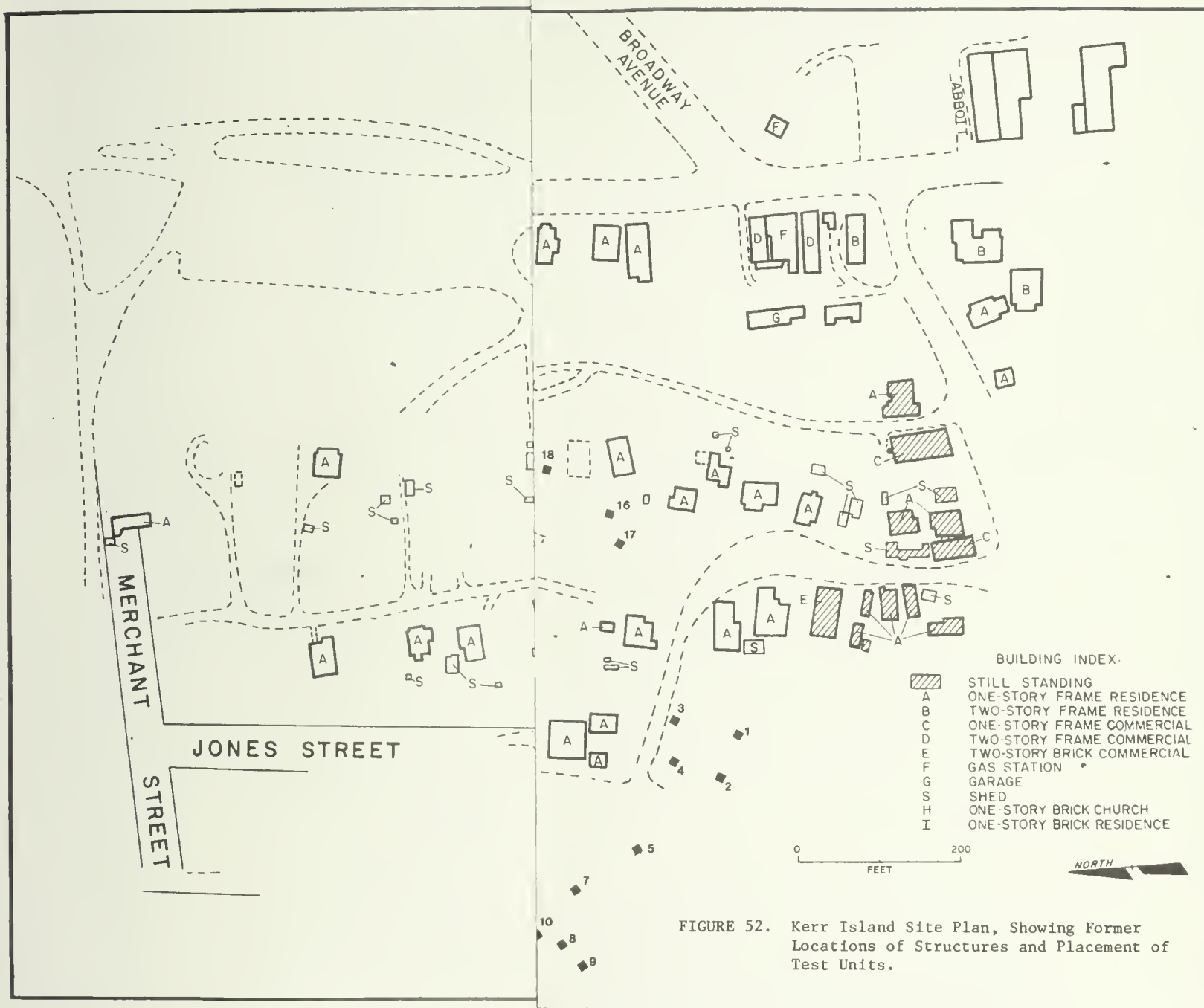
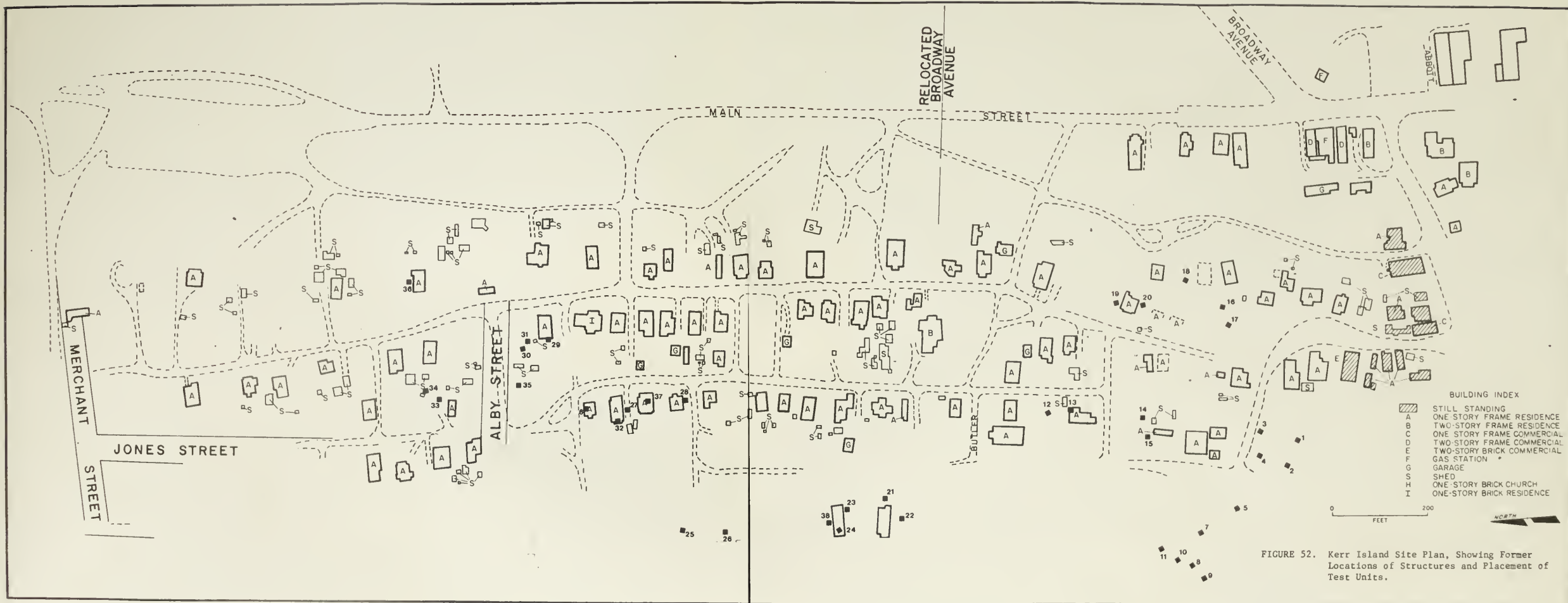


FIGURE 52. Kerr Island Site Plan, Showing Former Locations of Structures and Placement of Test Units.







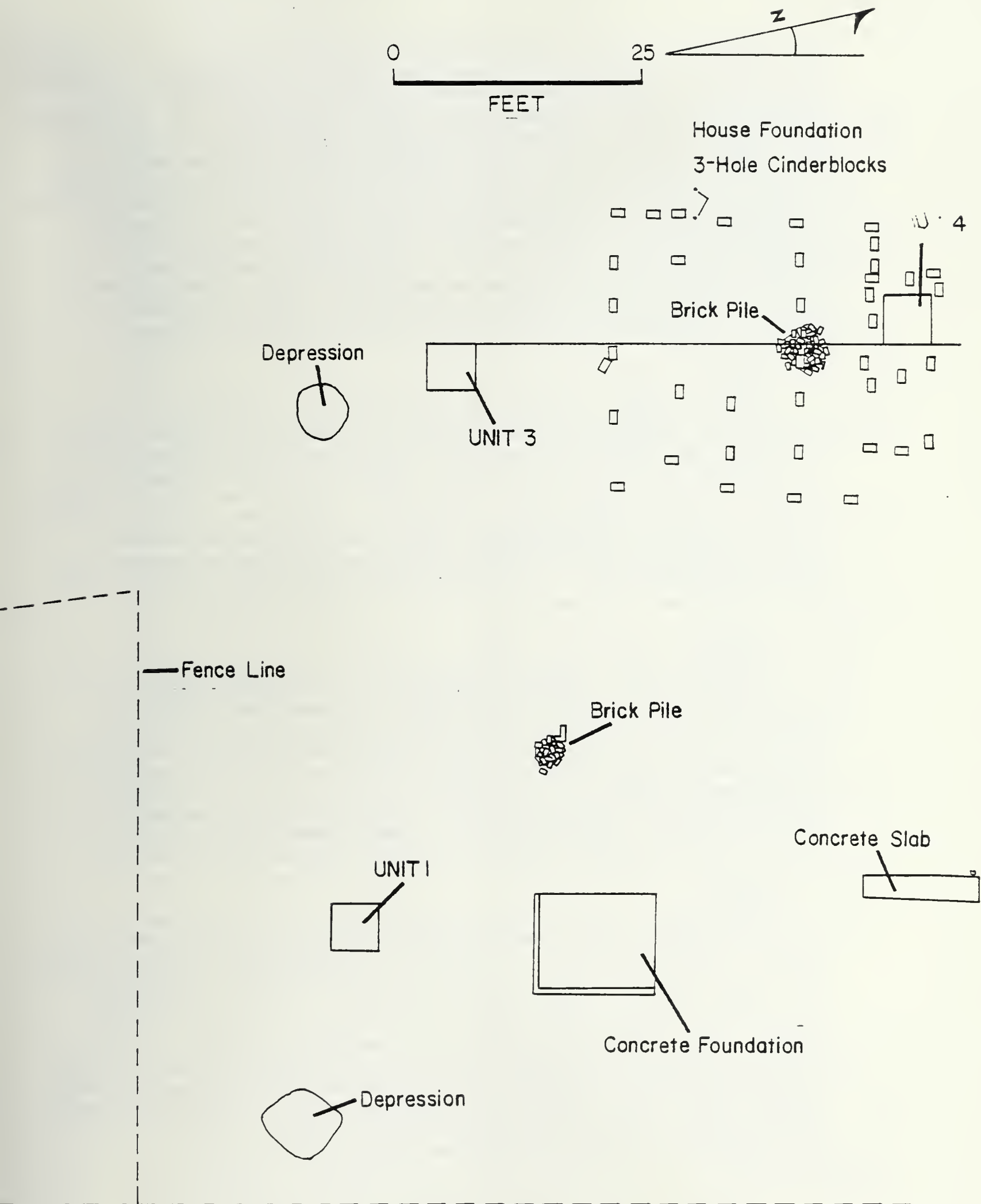


FIGURE 53. Detail of Kerr Island Site Plan, Showing Placement of Test Units 1, 3, and 4.



the structure of Lot 2. The controlled collection was not a total collection of surface artifacts, but was representative of the ground assemblage. The results of this collection generally indicate pre-1970 ceramics, glass, and other food container items along with miscellaneous furnishings, appliances, clothing, and building materials (Appendix A). The bulk of the ceramics and bottle glass came from the dump on the east side of Lot 1. Artifactual material from all over the two lots had a temporal range from the late 19th century to 1969, and appears to have been both primarily-deposited material that accumulated during occupation of Lots 1 and 2, and secondarily-deposited material that was spread over the lots during demolition activity. Since the vertical and horizontal artifactual content of the two lots was more accurately reflected in the test units, further analysis of the surface distribution of cultural material will benefit from the input of the results from the hand excavations.

### Unit 1

This test unit was placed in the back yard of Structure 1, Lot 1. The results of Test Unit 1 indicate a high concentration of 20th century ceramics, food container items, building material, miscellaneous clothing and personal items, and food remains. This material was concentrated in the top 1/2 foot of brown silty loam. Below the loam was compacted brown clay mottled with yellow clay. Artifactual material was much less abundant in the lower level, and included ironstone and earthenware ceramics, container glass, light bulb glass, building material, a marble, coal and other items (Appendix A). No cultural material was found below 1.5 feet below surface.

### Unit 2

Test Unit 2 was located in the yard at the northwest corner of Lot 1. Like Test Unit 1, Unit 2 contained a high concentration of 20th century cultural material in brown silty loam and clayey loam mottled with yellow clay. At .8 foot below surface was sandy yellow clay with a small number of artifacts, including post-1930 material. The presence of a wide temporal range of artifactual material from late 19th century bottle glass to styrofoam and plastic indicates long term accumulation of cultural material with some mixing of these archaeological deposits either during residential use of the lot or during demolition or both.

### Unit 3

Much of the upper archaeological deposits in Test Units 3 and 4 were mixed in with charcoal, ash, and burned building material from the destruction of the house by fire. The ground surface behind the structure on Lot 2 where Test Unit 3 was located consisted of ash mixed with sandy loam and dark cinders. The cinders were from coal stove heating and cooking, and were deposited during use of the house. Beneath this dark cinder and ash at .3 foot below surface was red cinder with some cultural material, followed by brown clay with dark loam mottling at .6 foot below surface, which finally graded into brown sandy clay. In the layers below the red cinder, artifactual material consisted of nails and bone with some ceramics and bottle glass in small proportions.



#### Unit 4

Test Unit 4 was located at the previous site of the front porch that was attached to the north side of the house. On the surface was ash and charcoal grading into ashy sandy loam. This contained large numbers of nails, window glass, and other building material deposited during the devastation of the house by fire, along with ironstone ceramics, bottle glass, a 1940 nickel, and a 1953 dime deposited during residential use of the structure (Appendix A). The occupation layer continued into sandy loam mottled with sandy clay that contained more ironstone, bottle glass, building material, shoe parts, a 1929 penny, and a buffalo-head nickel (date unknown). A brick footing uncovered at Level B (.3 foot below surface) may have been related to a structure pre-dating the cinderblock-piered house, but this is uncertain (Plate 74b). A sandy loam depression in the floor of Level B contained some bone fragments and shoe parts, and is interpreted as having been a dog wallow. Artifactual material was found in yellow brown clayey loam 1.35 feet below surface, consisting of bone, bottle glass fragments, and nail fragments. However, there is not enough artifactual data to narrow the probable date of the deposits more than after the late 19th century.

The testing in Lots 1 and 2 revealed a concentration of predominantly mid-20th century to late 1960s cultural material consisting partly of what is interpreted as post-abandonment, demolition-related materials, as well as artifactual material accumulated during occupation of the site. It is not known how much of the building material was related to demolition and construction previous to the late 1960s demolition of the structures on Lots 1 and 2, or whether the sandy clay deposits below 1 foot below surface were primary or secondary deposition. Some evidence for coal cinder dumping in the back yard of Structure 2 is not surprising after finding such deposits at Illinoistown and Middle Patch, though the absence of cinder in Unit 1 (the back yard of Structure 1) would suggest that coal stove waste dumping was done in discrete areas of the lot, perhaps out of the way of pedestrian traffic. The dump along the eastern fence line of Lot 1 may have been such a dump, though it contained predominantly late 20th century cultural material. The earlier cinder dump with household refuse may be buried under these later deposits. The advent of electricity and gas heating and cooking (during World War II, according to one local informant) might be a horizon marker for a change in refuse disposal practices, since the need to dispose of steady accumulations of coal stove wastes would have been eliminated along with the practice of mixing household refuse in with cinders to mask its appearance and odor.

#### Lot 3

This lot is located northwest of Lots 1 and 2 (Figure 52), and was abandoned by 1964 (Plate 71). The 1958 aerial photograph shows a long rectangular lot with the long axis of the lot trending northeast to southwest. The main structure in Lot 3 was located near the front of the lot on the east side. Three test units (8, 9, and 10) were placed in the front yard of the structure, within the structure, and near the rear of the structure. Irregularities in the surface of Lot 3, including shallow depressions in the western half of the lot and small mounds of building material and earth suggest ground impact during demolition.



A surface collection of artifacts in the front and back halves of the lot, which roughly translate into front yard and back yard/house, indicates a higher concentration of ceramics, bottle glass, and other household trash, as well as auto parts and building material, in the back yard. Temporally, the artifacts range between 1903 and 1965. Section 1 of the surface collection, located in the front or east end of the lot, contained rises in the ground surface that appeared to be piles of building rubble: wooden beams, planks, tar paper, bricks, and tires buried in the soil. Other late 20th century trash included cans, tires, clothing, bedsprings, old radios, and televisions scattered about the lot. In Section 2, located in the western part of the lot, a large pile of building material (concrete blocks, mortar, bricks, and asphalt shingles) had been deposited, as well as other items that may have been dumped on the lot by local residents following abandonment of Lot 3.

#### Unit 8

Test Unit 8 was located approximately at the site of the previous structure on the lot. Bone fragments, bottle glass, building material, and plastic containers were recovered in dark gray sandy loam that became lighter and sandier at .4 foot below surface. From .5 to .8 foot below surface was brown sandy clay containing more bone fragments, nails, cinders, and a small amount of ceramics and bottle glass. No cultural material was recovered below 1 foot below surface.

#### Unit 9

This unit was located at the rear of the structure near some shallow depressions in the yard surface. A loose, powdery loam mixed with ash, ceramics, bottle glass, shoe parts, building material, food remains, coal, and cinders (Appendix A) slowly graded into compact clayey loam that extended to a depth of 2 feet below surface, where yellow sandy clay with dark loam mottling began. The bulk of the cultural material was located in the top 1 foot, however, and based on temporally sensitive artifacts, ranged from the turn of the century to the mid-1960s. The presence of building material such as wire nails, ceramic bathroom tiles, asphalt shingles, etc., would suggest that the deposits were mixed with demolition material to at least 1 foot below surface.

#### Unit 10

This test unit was located in the front yard of Lot 3. The top level of deposits consisted of cinders, coal, ash, and battery parts extending from the surface to .5 foot below the surface. Artifacts consisted of ceramics, bottle glass, wire nails, hardware, and building material. Below the cinders and ash was loamy clay with few artifacts, grading into sterile yellow clay at 1.3 feet below surface.

The data from the investigation of Lot 3 is in accord with the results of Lots 1 and 2 in that demolition material and late 20th century trash were mixed with or on top of early 20th century to mid-1960s cinder, ash, and household refuse mixed in clayey loam. Cultural deposits extended into sandy yellow clay mottled with clayey loam below 1 foot below ground surface. The almost uniform presence of building



material in various areas of Lots 1, 2, and 3 might suggest earlier building, renovation, or salvage activity in the lots prior to the last documented structures on the lots. Testing at Lots 4, 5, and 6, where some structures are still standing and presumably previous impact by demolition is at a minimum provided a good comparison for Lots 1, 2, and 3.

#### Lot 4

This lot is located north of Lots 1 and 2 and contains Test Units 14 and 15 (Figure 52). Examination of the 1964 aerial photograph indicates that the long structure labelled "A" is a shotgun house with the front facing south (Plate 71). The smaller structures labelled "S" are sheds or outbuildings at the back of the lot associated with this shotgun house. Test Units 14 and 15 were placed in the back yard among the outbuildings of Lot 4 (Figure 52).

#### Unit 14

Test Unit 14 consisted of dark clayey loam with charcoal containing a large amount of refuse mixed in the top 1 foot, including ceramics, bottle glass, window glass, nails, food remains, etc. (Appendix A). At approximately 1.5 feet below surface was yellowish-brown silty clay with no artifacts.

#### Unit 15

The top deposits in this unit were similar to those in Test Unit 14: dark clayey loam with cultural material. At .5 foot below surface, a wood-lined trash pit feature containing bottle glass, wood, metal, and brick fragments extended to a depth of about 3.8 feet below surface. The feature may represent a refuse-filled privy pit associated with the structure. According to analysis of container glass from the test pit, the refuse dates from after 1930 (Appendix A). The refuse pit had been excavated into sterile silty clay.

Test Units 14 and 15 followed the pattern of cultural material mixed 1 to 1.5 feet deep in clayey loam overlying silty clay. The processes involved in the origin and deposition of this artifactual material are not discernable from the tests and though demolition probably played a part in this process, control tests in relatively unimpacted areas suggest that the deposits may have become mixed and buried over 1 foot deep during occupation and use of the lots. Two ways this could have happened are from the burrowing or trampling by farm animals of the lot deposits or from horticultural practices. The wood-lined trash pit was the only feature that extended below the yard deposits. Privies would be expected to be a common type of cultural feature on the island, judging from examination of aerial photos, and undoubtedly many more such trash deposits in abandoned privies would be found through more intensive excavation.

#### Lots 5 and 6

These two lots, which still contain standing, though unoccupied, shotgun houses, are located on the 1964 aerial photograph at the western



edge of the settlement (Plate 71). One interesting thing about each of these two lots was the large yard created by positioning the structures at the west side of the lot. Garden plots west of these lots were probably associated with the lots (Plate 71). Three structures are shown on the aerial photograph; however, by the time of the field investigation the middle structure had been removed (compare Plate 71 and Figure 52: Test Units 21, 22, 23, 24, and 38). Impact to Lots 5 and 6 by this demolition appears to have been minimal. Test Units 21 and 22 were placed in front of and beside the structure shown in Plate 72b, and Units 23, 24, and 38 were located near the side door, inside the house, and beside the second structure (Figure 52).

#### Unit 21

The deposits in this test unit consisted of a .2 foot thick layer of loam topsoil underlain by cinders, ash, and loam grading into medium brown loamy clay at .5 foot below surface. At 1 foot below surface, in the medium brown loamy clay, was a 1-foot diameter post hole containing pieces of wood. The feature contained no artifacts and extended deeper than 2 feet below surface. This post hole is interpreted as the remains of a utility pole. Within the unit, most of the cultural material, consisting mainly of ceramics, food container items, fruit pits, bone, nails, etc., was located in the upper .25 foot of loam and cinders.

#### Unit 22

This unit was placed beside the house on the south side (Figure 52). The archaeological deposits consisted of dark loam grading into silty clay to .8 foot below surface, and underlain by culturally sterile silty clay. Cultural material, including ceramics, bottle glass, nails and other hardware, was recovered from the upper .6 foot of deposits.

#### Unit 23

This unit was placed adjacent to the steps of the side door of the structure on Lot 6. A top layer of loam and cinder graded to ash and cinder at .25 foot below surface, and extended to a depth of .9 foot below surface. Beneath this cinder layer was dark brown clay with no cultural material. A large number of artifacts, including ceramics, container glass, nails, and window glass, was recovered from the loam and cinder layers (Appendix A).

#### Unit 24

This test unit was placed inside the structure (Figure 52). This structure consisted of two sections: a front 1-room section and an attached shotgun structure that had the floor and interior divider walls removed. The structure was last used as a pen for animals. The deposits consisted of compact clay with fragments of floor boards buried beneath the surface grading into yellow clay at .5 foot below surface. Very little artifactual material was recovered from this unit, and it consisted of the same range of cultural material recovered elsewhere (ceramics, bottle glass, building material), but in smaller proportions (Appendix A).



### Unit 38

This unit was located on the north side of Structure 2, at the side of the house. On this side of the house there are window openings but no doors. On the surface was brown sandy loam grading into yellow brown silty clay at .5 foot below surface. Cultural material was sparse and restricted to the top .25 foot (Appendix A). One artifact, a soft drink bottle base, dated to between 1930 and 1949, while an aluminum pull tab indicates post-1950 deposition as well.

In general, the results of the five test units in Lots 5 and 6 indicate more range in the nature of the deposits related to intensity of use than was seen in areas subject to earlier demolition. Test Unit 38, located in a peripheral side area subject to less direct contact with residents, contained very little artifactual material, mainly pedestrian throw-away items such as bottles and a pull tab, or lost items such as the two marbles and a toy (Appendix A). Test Units 21 and 23, located in front of or adjacent to the front structure, both contained cinders and household refuse remains as well as some building material. In the case of Unit 23, located adjacent to the door, it is possible that dumping of cinders was done to provide a firm pathway over the muddy yard, though further excavation would be necessary to verify this observation. The deposits examined inside the north structure indicate the existence of floorboards previous to conversion of the structure as a livestock shed. Reuse of abandoned structures through modification or salvage, and the incorporation of unused lots by moving gardens from the yard to an adjacent and abandoned lot seems to have occurred during decline of the settlement.

### SUMMARY

The results of the testing at these six lots generally encompasses the range of archaeological deposits throughout the site, so no discussion of other 24 test units is necessary. In general, cultural material is abundant and deposits extend a foot or more below surface in a dark brown clayey loam matrix. The mixing of deposits through plowing in some abandoned lots, and the spread of material during salvage and demolition lessens the research value for many of the archaeological remains at Kerr Island. However, many areas of the island have had few impacts to the deposits, and the existence of at least one excavated trash feature suggests that intact cultural deposits associated with the 20th century residential use of the island do exist.

Though the objectives outlined in the research design were not fully resolved by the fieldwork, several observations can be made about the cultural processes that produced the Kerr Island archaeological remains, and the site's potential for further data recovery leading to a better understanding of the community and its residents can now be evaluated. Though the data base from these testing investigations was not extensive enough to quantify the disposal pattern of cinders from coal stoves and household refuse, the results of the testing do have some strong implications for how these activities may have differed at Kerr Island from disposal practices in other areas of the city. As a



whole, the absence of cinders from most tested areas of the island is the most singular departure from the pattern exhibited elsewhere in East St. Louis. Even where cinder deposits were observed at Kerr Island, they were relatively shallow (less than .5 foot). This may have been a result of the fairly short term of occupation at Kerr Island (40-60 years) as compared to Illinoistown and Bloody Island (120+ years), or of the density of dwelling units at Kerr Island during much of its history. Though during its peak, Kerr Island may have had a comparatively larger population density than Illinoistown, the dwellings were mostly 1-story, single or extended family units, rather than multi-story, multi-family units. Therefore, the Kerr Island units may have generated less energy waste per lot area. The Kerr Island community may also have been using a source of energy other than coal. Salvage of lumber from abandoned buildings may account for the large amount of nails and ash in the lots. Another possibility is that the disposal of refuse in gardens resulted in a thorough mixing of cinders, ash, and sandy loam so that the coal layers typical of urban lots where gardening was not practiced may not be present in semi-urban areas like Kerr Island. Finally, the occurrence of cinder deposits adjacent to a front door (Test Unit 23) and in the road (Test Unit 27) may indicate cinder disposal in low, muddy areas where pedestrian and vehicular traffic was the heaviest. Trash deposits in a wood-lined pit (probably a privy) and along a fence line separating lots would suggest a conscious attempt to consolidate trash disposal into small areas.

In conclusion, it appears that additional study of Kerr Island has the potential to add to the understanding of cultural development and social interaction in the metro-East area. The segment of history that the 20th century settlement at Kerr Island represents is not well documented, but is very important in understanding the history of a disenfranchised population. The testing at Kerr Island has raised more questions than it has answered, and it is believed that further data recovery is necessary to complete the documentation of this historically and archaeologically significant site.

In addition, the early history of Kerr Island relating to the ferry landing may offer some archaeological potential. The state of preservation of the 19th century archaeological record for old Venice is unknown. A testing program at old Venice can easily be incorporated into the Kerr Island data recovery phase since both occupations overlap physically, although the old Venice deposits may be deeply buried. The possible loss of the early 19th century component of the Piggott ferry complex through erosion and subsequent landfill can be mitigated if the 19th century Venice ferry complex is archaeologically available. Recommendations for Kerr Island, as well as the other sites that were tested as a part of the East St. Louis MARGE archaeological project, are included in Chapter IX of this report.



## VII. LABORATORY METHODOLOGY AND ANALYSIS RESULTS

### INTRODUCTION

Throughout the past two decades, many historical archaeologists in the United States have adopted a classification system for historic artifacts that was developed by Stanley South in 1960 (South 1962). In South's system, artifacts are analyzed within a generalized type-ware-material-class-group system (Table 1), in which the most detailed analysis is performed at the "type" level and the most generalized analysis occurs at the "group" level. The more detailed levels of analysis within this system are based primarily upon differences in formal characteristics, while more and more functional considerations are taken into account in the upper-level analyses. At the class level, South identifies 42 separate categories, based largely on formal differences, with some differences in function. These classes are then clustered into nine functional groups (Table 2). The assumption underlying South's classification system is that comparison of results at the various levels of organization will produce answers to questions that are consistent with the degree of generalization at that level. For instance, information on broad cultural processes should be revealed at the group level of organization because of the "functional relationship between the group and generalized behavioral activity in the cultural system" (South 1977:93), while at the type level of classification, differences in stylistic properties and manufacturing techniques will be the primary kinds of information that are revealed.

While many archaeologists have used South's classification system in a variety of contexts, it is primarily designed for use on sites that date to before 1850. With the advent of the industrial revolution and the rise of urbanization, both the number and the types of artifacts increased way beyond those represented in South's classification system. In fact, such great changes are present between the artifact assemblages represented in South's classification and those of the post-industrial revolution era that even South's functional groups are not sufficient to cover the wide range of data that is produced from sites that post-date this period or that are found in a well-established urban setting.

The sites that have been investigated during the East St. Louis MARGE archaeological testing project primarily date from 1850 to the present. Because of their recent dates of use or occupation, and because they are located within an urbanized area, the artifactual material that was recovered from these sites is both enormous in quantity and diverse in scope. For these reasons, it was decided that although South's classification is certainly a valid one for colonial and early American sites, a classification system would need to be developed that would more accurately reflect the types of activities (and their behavioral implications) that take place within an urban, industrial context. Thus, the East St. Louis classification system was generated.



TABLE 1. South's Artifact Classification System. Source: South 1977:93.

<u>Type</u>	<u>Ware</u>	<u>Material</u>	<u>Class</u>	<u>Group</u>
Blue painted pearlware	Pearlware	Earthenware	Ceramics	
Polychrome painted pearlware				
Annular pearlware				
Edge decorated pearlware				
etc.	Creamware	Stoneware	Wine Bottle	Kitchen
	Whiteware		Case Bottle	
	etc.		Tumbler	
			Pharmaceutical Bottle	
		Porcelain	Glassware	Bone Architecture Furniture Arms Clothing Personal Tobacco Pipe Activities
			Tableware	
		Tinware	Kitchenware	
			etc.	
		Woodenware (treen)		
		Pewterware		
		etc.		



TABLE 2. South's Artifact Classes and Groups. Source: South 1977: 95-96.

Kitchen Artifact Group

Class

1. Ceramics
2. Wine Bottle
3. Case Bottle
4. Tumbler
5. Pharmaceutical Type Bottle
6. Glassware
7. Tableware
8. Kitchenware

Clothing Group

Class

19. Buckles
20. Thimbles
21. Buttons
22. Scissors
23. Straight Pins
24. Hook and Eye Fasteners
25. Bale Seals
26. Glass Beads

Bone Group

Class

9. Bone Fragments

Personal Group

Class

27. Coins
28. Keys
29. Personal Items

Architectural Group

Class

10. Window Glass
11. Nails
12. Spikes
13. Construction Hardware
14. Door Lock Parts

Tobacco Pipe Group

Class

30. Tobacco Pipes

Furniture Group

Class

15. Furniture Hardware

Activities Group

Class

31. Construction Tools
32. Farm Tools
33. Toys
34. Fishing Gear
35. Stub-stemmed Pipes
36. Colono-Indian Pottery
37. Storage Items
38. Ethnobotanical
39. Stable and Barn
40. Miscellaneous Hardware
41. Other
42. Military Objects

Arms Group

Class

16. Musket Balls, Shot, Sprue
17. Gunflints, Gunspalls
18. Gun Parts, Bullet Molds



## THE EAST ST. LOUIS CLASSIFICATION SYSTEM

In the formulation of this classification system, South's assumption about the use of hierarchical levels of organization was considered to be a valid one and was also used as the basis for this system. In the ESL classification system, there are eight functional categories, as opposed to South's nine categories, plus separate categories for miscellaneous objects and non-identifiable artifacts. The eight functional groups and the major classes that are included within them, on a "best fit" basis, are shown in Table 3.

As can be observed from a comparison of Tables 2 and 3, the East St. Louis classification system differs from South's classification in several respects. For example, the Subsistence group in the ESL system actually consists of South's Kitchen group (minus non-subsistence related bottles and glassware) plus his Bone group (but only if the bone appeared to be butchered or cooked), with the addition of artifacts representing other kinds of subsistence-related containers and the use of fast foods. This functional group was broadened so significantly because, with the advent of prepared foods and carry-out restaurants, one can no longer assume that all food production/consumption takes place within the kitchen. However, the ESL Structural group is nearly identical to South's Architecture group (with the addition of building materials and utilities-related artifacts), and the ESL Furnishings/Appliances group is very similar to South's Furniture group (with the addition of electrical appliances).

The ESL Weaponry group includes those artifact classes that South subsumed under his Arms group, with the addition of knives and military objects from his Activities group. The differences between South's Clothing group and the ESL Clothing/Adornment group are negligible, being primarily in terms of additional types of clothing-related artifacts found at East St. Louis that were either not available prior to the industrial revolution or were not preserved on the sites that South investigated. The ESL Personal group is similar to South's Personal group in the types of artifact classes that it includes, but it differs significantly in that all smoking-related artifacts, which South placed under both his Tobacco Pipe group and his Activities group, have been placed within the ESL Personal group. Also included within the ESL Personal group are cosmetic and medicine bottles, which presumably would have been included within South's Kitchen group, items for personal hygiene, first aid and health items, coins and tokens, and keys. The Activities group for the ESL system is also similar to that used by South, but the types of activities represented within the East St. Louis artifact collection are much different and broader in scope than those represented in South's collection. The major difference between South's Activities group and that used for East St. Louis is that all activities relating to transportation have been subsumed under a separate group, entitled Transportation, for the ESL classification system. With the advent of steam power, railroads, and, later, gas-powered vehicles, the importance of transportation as a determining factor in human behavior has risen to the point that it must be considered as a separate functional group.



TABLE 3. The East St. Louis Classification System.

Subsistence Group

Ceramics

Container Glass--(subsistence-related bottles, tumblers and glassware, glass dishes, etc.)

Container Other--(lids of all types, tin cans, paper and plastic food/drink containers, closures, etc.)

Implements/Utensils--(tableware, cutlery, pots, pans, handles, kettles, plastic utensils, etc.)

Fast Food Artifacts--(identifiable refuse from the fast food industry)

Food Remains--(butchered bone, fruit pits, corncobs, shell, etc.)

Structural Group

Window Glass

Nails--(wrought, cut, wire)

Construction Hardware--(bolts, nuts, screws, washers, tacks, braces, screen, hooks, staples, hinges, lock parts, etc.)

Building Material--(mortar, bricks, plaster, asbestos, wood, asphalt, linoleum, cement, tar paper, etc.)

Utilities--(drainpipe, fuses, light bulbs, plumbing hardware, insulators, wiring, outlets, etc.)

Furnishings/Appliances Group--(flowerpots and planters, furniture parts, ash-trays, clock parts, appliance parts, wall and shelpaper, tiles, window blinds, etc.)

Weaponry Group--(guns, ammunition, hunting knives, etc.)

Clothing/Adornment Group--(clothing, shoe parts, fasteners, jewelry, etc.)

Personal Group--(smoking remains, cosmetic and medicinal containers, coins and tokens, combs and brushes, keys, eyeglasses, hygiene items, hair curlers, hairpins, bandaids and first aid items, etc.)



TABLE 3. (concluded)

Activities Group--(phonograph records, pencils and pens, toys, clothes pins, tools, TV and radio/phonograph parts, newspapers, fishing gear, etc.)

Transportation Group--(railroad-related artifacts, car and truck parts, horseshoes and harness, etc.)



The Miscellaneous category was set up to include material that has no readily discernible function or association with the site other than simply being present. This includes wood fragments, unworked bone, coal, canned coal, cinder, and clinker. Also, there are always those artifacts that are either too badly fragmented, rusted, or elusive to be identified. These have been placed within the Non-identifiable category according to their composition (i.e., metal, glass, plastic, paper, etc.).

Of course, there are still problems to be worked out with this system, but they are problems that must be discussed within the broader scope of urban/industrial archaeology. The complexities of dealing with the material remains generated by an industrialized people living over long periods of time within a confined space are just now becoming apparent. The East St. Louis classification system was designed to put into order a vast quantity of material remains, the likes of which have only rarely been systematically collected before. There is, of course, the well known work on contemporary disposal patterns that has been taking place in Tucson, Arizona, during the last several years (Rathje and McCarthy 1977:261-286), but the classification system for the Tucson "Projet du Garbage" differs significantly from either South's system or the ESL system in that no attempt was made in Tucson to develop a hierarchical ordering of material remains based on form and function. It is this hierarchical ordering that allows generalizations to be made about human behavior at various levels of analysis.

The following pages will include a discussion of each of the functional groups within the East St. Louis classification system: the types of artifacts included within each group, the methods of analysis, lower-level classification systems, and problems encountered during analysis. The results of the artifactual analysis for selected sites will be included at the end of the chapter.

#### SUBSISTENCE GROUP

The Subsistence group is defined as being those material remains that are directly associated with food preparation and consumption. It does not include artifacts associated with food procurement. The primary artifact classes within the Subsistence group are ceramics, subsistence-related bottles and glassware, other types of food containers, implements and utensils, artifacts associated with the fast food industry, and food remains. There are, of course, some problems with determining whether particular artifacts should be classed within this group. For instance, ceramics that are obviously not food-related, such as figurines and dolls, flower pots, drain pipe, insulators, etc., have been placed in more appropriate functional categories. However, the fact remains that when one is dealing with small ceramic fragments, one cannot always determine whether they originated from a container designed for holding food or from a purely decorative item. In cases such as this, sound judgment must prevail in making the decision. Similarly, small pieces of container glass cannot always be identified as being from a food-related artifact, but in the absence of better information, this category must be used. Again, as in the case of ceramics, glass artifacts that can be identified as having

a function separate from subsistence have been classed within their respective groups. These include light bulbs and fixtures, cosmetic and perfume bottles, shoe polish bottles, glue jars, etc.

Another problem that is encountered in the assigning of any functional category, and not just within the subsistence group, is the matter of multiple functions. Does one assign function on the basis of the use for which the artifact was originally intended or a perceived use that is different and unique? In several instances, artifacts were recovered that are actually designed to have more than one function. To resolve these problems during the analysis of the East St. Louis artifacts, reliance was placed upon a "best fit" mode of classification. For the most part, the persons conducting the analysis were also the persons who had been involved in the fieldwork, and in such cases, the provenience of the artifact as observed by the fieldworker was used to make the functional determination.

### Ceramics

Ceramics classification in historical archaeology has traditionally been concerned with ceramics manufactured prior to 1850, when ceramic technology was changing at such a pace that both technological and stylistic differences could be used to provide a tight ceramics chronology. As a result, ceramics have become an important diagnostic artifact in historical archaeology. The widespread use of South's "Mean Ceramic Dating Formula" (South 1972:71-116, South 1977:201-274) testifies to the importance of ceramics as a temporal indicator. Moreover, ceramics have been used as a status indicator as well (Otto 1977:91-118).

It appears, however, that ceramics technology was one of the first to feel the effects of industrialization and mass production. Even as early as the 1830's, the introduction of those ceramic types known as "whitewares" and "ironstones" was resulting in an influx into the market of inexpensive ceramics bearing a great deal of similarity to each other. From this period to the present, the ways in which ceramic technology has changed are not conducive to purely visual inspection. It is highly probable that techniques such as controlled analysis of paste hardness or thin-section analysis can be used to refine a late 19th and 20th century ceramic typology, but in the absence of such techniques, visual inspection of ceramics from this period shows very little in the way of observable technological differences. As a result, the ceramics from East St. Louis, except for those bearing maker's marks or diagnostic patterns, have turned out not to be extremely useful in either the determination of temporal brackets for sites or in the analysis of socioeconomic status for the occupants of the sites.

The classification system for the East St. Louis ceramics is an adaptation of one that has been used on historic sites in South Carolina and in Mississippi (Gray n.d.), and is an adaptation of a system first developed by J. Jefferson Miller II and Lyle M. Stone in their analysis of ceramics from Ft. Michilimackinac (Miller and Stone 1970). Briefly, Miller and Stone developed their classification of 18th century ceramics



on the basis of an hierarchical arrangement of technical differences. The primary distinguishing factor was the difference in paste type and appearance. Physical and/or stylistic properties were then used to further subdivide the three basic classes (earthenware, stoneware, and porcelain). The final level of analysis was based on style and/or technique of decoration (1970:4). The systems that Miller and Stone used and that is being used here, with some adaptations, are both characterized by being exhaustive in terms of the ceramics that were identified, by having mutually exclusive classes, and by having a single basis of division between ranks. Both systems are flexible enough to allow the choice of relevant taxonomic criteria that approximate the historically known situation.

The historic ceramic artifacts from East St. Louis were first divided into three primary classes based upon technological differences and historical context: earthenware, stoneware, and porcelain. These three classes were then sorted into various exclusive groups based upon certain physical and/or stylistic properties. Further subdivisions were finally made on the basis of decorative style and technique. The definitions of these types and the reasons for these divisions are described in more detail in the following paragraphs. Where considered necessary, references have been provided for certain classificatory decisions that were made during this identification. In other instances, references have been deleted when the information presented was considered by the authors to be common knowledge within the field of historical archaeology. As in prehistory, historic artifact identification and analysis have reached the point when certain artifact types need not be referenced because their meanings and characteristics have been generally accepted by the profession.

### *EARTHENWARE*

The ceramics included within the earthenware class are characterized by a porous, permeable paste made up of various mixtures of clay and fired at a low temperature.

#### *Coarse Paste Earthenwares*

These ceramics have a highly porous, granular paste consistency, tend to be relatively thick, and are generally considered to be highly utilitarian in nature (Noel Hume 1974:99). Because of their widespread occurrence, both temporally and spatially, they are not useful indicators for dating purposes or for the development of trade networks. Their presence within a site, however, can sometimes be used in the analysis of status differences, as has been demonstrated by Otto's (1977) study of dietary and status indicators among planters and slaves at an antebellum plantation site in coastal Georgia. Whether these ceramics can also be used in this method on sites dating to the late 19th and the 20th centuries has not been tested.

The coarse earthenwares from East St. Louis were divided on the basis of paste color (reflecting the use of various clays), the presence or absence of a glaze (used to provide impermeability), the type of glaze

(based on its chemical content), and, finally, the color of the glaze (indicating decorative differences).

### *Fine Paste Earthenwares*

The fine earthenwares have a smooth, fine-grained paste consistency and are relatively thinner than the coarse earthenwares. The early fine earthenwares (i.e., those dating to before 1830) can be remarkably useful as temporal indicators because of their numerous stylistic changes through time. These changes, caused by technological innovation (e.g., the development of pearlware as an "improvement" over creamware) or by trends in popularity (e.g., the adoption of transfer-printed decoration as an extremely popular style during the early 19th century) have been well documented by various authors (South 1972, 1977:201-274; Noel Hume 1974:102-138). The later earthenwares, as stated earlier, are less useful as temporal indicators because of their visual homogeneity. Also, their widespread use because of mass production and inexpensive cost makes the later earthenwares less useful as status indicators.

The fine earthenwares from East St. Louis were first divided into two categories reflecting degree of paste hardness. This trait is controlled within the defined limits of the earthenware category by the chemical content of the paste and the relative temperature at which it is fired. It can be used to a certain extent as a chronological indicator, the soft-paste earthenwares generally being earlier than the hard-paste earthenwares. Of course, there is some overlap as well (South 1977:211-212; Castille 1979:5-15). The hardness was determined by scratching the edges of the sherds with a tempered steel tool. Those sherds classified as soft could be scratched with very little pressure; a dark metallic line and no indentation was left on the sherds classified as hard.

The soft-paste fine earthenwares were subsequently grouped into creamware, pearlware, and whiteware. In this instance, categories were used that had more than one basis of division between classes, but that more accurately followed historical context (Godden 1965; South 1972, 1977; Noel Hume 1974).

Creamware was first developed during the mid-18th century and was manufactured until 1820 (South 1977:212). It is characterized by a buff-colored paste and a clear lead glaze exhibiting a yellow or green tint in the crevices. Creamwares vary from a rich buff color to a light cream, with the latter generally dating after 1775 (South 1977:212). A variety of decorative techniques was used on creamware bodies, the descriptions of which can be found in numerous well known references (Godden 1965; Miller and Stone 1970; Noel Hume 1974). The more common of these techniques include molding, handpainting, transfer-print decoration, edge decoration, banding (annular wares), and sponge or spatter decoration.

In 1779 Josiah Wedgwood introduced a new, whiter version of the standard creamware body; this he termed "Pearl White" (Godden 1965:xxi).



Pearlware differed from the earlier creamware in that cobalt was added to the lead glaze to produce the whiter appearance (Noel Hume 1974:128). Initially, the paste color was buff, although by the early 1800s, it had been modified to an almost pure white (Sussman 1977:105-106). Pearlware can be differentiated from creamware by a bluish cast to the glaze. The blue color is especially pronounced in the crevices around footrings and rims. Manufacture of the soft-paste pearlwares continued until approximately 1830 (Sussman 1977:110).

Whiteware is distinguished from the creamwares and pearlwares by a pure white soft paste and a totally transparent lead glaze. There is no indication of color in the crevices. Whiteware was first manufactured in 1820 and continued in production until well after 1900 (South 1977:211). The same decorative techniques were used on both pearlware and whiteware, and have also been described elsewhere.

The hard-paste earthenwares from East St. Louis were grouped into two categories: ironstone and yellowware. Ironstone is used here as a generic term for those durable earthenware ceramics that exhibit a pure white hard compact paste and a clear or cobalt-tinted lead glaze. "Ironstone" is also used as one of the brand names for this type of earthenware, others being "New Stone," "Turner's Patent," and "Stone China" (Godden 1965:xxiii). Ironstone was first manufactured in 1813 and is still being produced today (South 1977:211). Yellowware is a name that has been given to those ceramics possessing a durable, compact yellow body and a clear lead glaze. This type of earthenware is rarely referenced as a separate category in the published literature, generally being subsumed under the category of annular wares. This practice has occurred because the most common form of decoration on this largely utilitarian ware consists of concentric blue bands and white ridges (Noel Hume 1974:131). However, if one is classifying ceramics in terms of an hierarchical arrangement, as is the case here, it is apparent that yellowware should be separated into its own category on the basis of its hard, compact paste composition. Noel Hume (1974:131) states that this type of ceramic was first developed around 1800 and is still being produced today.

#### *STONEWARE*

Characteristic of ceramics within this class is a compact, finely grained non-porous opaque body that has been fired at a higher temperature (1300°C) than have the earthenwares (Godden 1965:xii). Since stonewares, by their very nature, are impermeable, the use of various glazes on stonewares is considered more of a decorative technique than utilitarian in nature.

The stonewares within the East St. Louis collection were divided first on the basis of paste color (denoting the use of various clays and/or firing techniques). Further subdivisions were based upon the presence/absence of surface treatment, type of surface treatment, and color of surface treatment or decoration.

## PORCELAIN

Porcelain is a highly vitrified ceramic distinguished by a translucent body. It is further divided into two groups according to paste hardness. Hard-paste porcelain, first manufactured in China and later in England, continental Europe, and the United States, consists of a mixture of kaolin and feldspar (petunse), shows a conchoidal fracture, and is only fired once, both body and glaze, at an extremely high temperature (1400°C+) (Godden 1965:xvii; Noel Hume 1974:258). Soft-paste English and American porcelain is manufactured from a mixture of ground glass and white clay, sometimes with feldspar or bone ash added. When chipped, the body is granular. It is first fired in an unglazed state (bisque firing), then re-fired at a lower temperature after glazing (Godden 1965:xvii).

## Container Glass

In terms of providing a tighter chronology for some of the East St. Louis sites based on artifactual analysis, container glass has proven to be much more valuable than ceramics. Unlike ceramics technology, which has not changed substantially since around 1830, the technology of manufacturing glass bottles and other containers has undergone a whole series of radical changes during the 19th and 20th centuries. Dessamae Lorrain (1968:43) has pointed out:

"The dateable changes in nineteenth century glass involve manufacturing techniques. It therefore behooves archaeologists to learn the distinguishing characteristics of the products of these techniques so they can be identified and dated when encountered in the course of the excavation. The description of glass pieces in a site report should include the manufacturing process and the criteria used to determine it."

There are several characteristics of glass bottles that, when combined, can elucidate the manufacturing techniques that were used during their production. These characteristics also allow glass artifacts to be grouped together within a hierarchical classification system. The most easily observable characteristic is that of color, which has been used here as the primary distinguishing characteristic, and is a function of the materials used within glass production. The color of glass containers is generally not a good indicator of temporal range, although certain colors can be dated fairly accurately.

Traditionally, bottle glass has been tinted in shades of blues or greens. These colors, except for royal blue (such as is found in milk of magnesia bottles), and a bright emerald green (like that of 7-up bottles), cannot be dated because of their long existence. When glass containers became popular for food storage as well as the storing of beverages in the early 19th century, it was considered desirable to develop clear glass containers that provided a sense of purity of the contents. The first attempts at this were accomplished by adding small amounts of manganese to the glass mixture. When this glass was exposed to the ultraviolet rays



of the sun, however, it took on a slightly purple tint. Amethyst glass can be dated fairly tightly on the basis of color alone to between 1810 and 1917. While manganese was in short supply during World War I, selenium was used to tint glass bottles. This coloring agent turned glass an amber color, and was most commonly manufactured from 1914 to 1930. Arsenic, as a neutralizing agent for obtaining truly clear glass, first was used around 1880 and became prevalent around 1930, replacing manganese and selenium permanently. It is still the primary neutralizing agent in use today (Munsey 1970). The other most common glass color during the 20th century is brown, which was first produced in 1873 (Ayres, personal communication).

The next level of classification for glass containers is the manufacturing technique that was used. During the 19th and 20th centuries, the two most common techniques have been the use of various kinds of molds and automated bottling machines. Blown glass containers, most common prior to 1800, are still manufactured, but the emphasis now is upon mass-produced glassware. During the East St. Louis investigations, almost no blown glass was found. This is to be expected since all of the sites investigated date to after 1830, when mold-produced bottles became common.

On the other hand, practically every type of molded bottle that has been manufactured has been represented within the East St. Louis collection. Shoulder-height dip molds, an ancient technique that was finally abandoned around 1880, are characterized by no vertical seams, but a horizontal seam is visible around the shoulder (Ayres, personal communication). The 2-piece bottom hinge mold, with a seam running across the base of the bottle, was used in the period between 1810 and 1880. The 3-piece dip mold dated to between 1870 and 1910, and is identified by a mold seam around the shoulder and two vertical seams on either side of the neck (Munsey 1970). Finally, the turn paste mold, characterized by vertical mold seams, horizontal striations on the body, and sometimes the presence of a pontil mark, dated to between 1880 and 1920 (Newman 1970:72).

In 1891, the semi-automatic bottling machine was introduced. Bottles made by this method are identified by seams to within 1/4 inch of the rim and necks ground to a smooth finish. The semi-automatic bottling machine was used to 1920, although it was superseded in 1903 by the introduction of the fully automatic bottling machine. This method, which is still in use today, produces bottles that are characterized by vertical seams to the very top of the bottle and an irregular circular seam on the base (Munsey 1970).

Certain embossed statements on bottles can be used as a dating technique. The first lettered panel bottles were produced in 1867, and resulted in the bitters (patent medicine) craze between the 1860s and 1900 (Lorrain 1968:44). Ownership statements on bottles were first introduced in 1903 and are still being used today. These were the forerunners of "return for deposit" bottles. Common statements included "this bottle is never sold" and "we pay for evidence convicting thieves for refilling our bottles", (Paul and Parmalee 1973). "No deposit, no return" bottles, on the other hand, were first produced in 1938 (Ayres, personal communication).

The other type of embossed statements on bottles that can be used for identification purposes are those that have been required by federal legislation. The Pure Food and Drug Act in 1907 prohibited the adulteration or misbranding of any food. From 1933 to 1964, liquor bottles were required to possess the statement: "federal law prohibits sale or reuse of this bottle" (Munsey 1970).

Finally, the various types of techniques used to produce bottle rims can also be used in identification and dating. The sheared lip, characterized by a plain cylindrical top, dated to between 1810 and 1840. This was superseded by a laid-on ring rim, that was used until 1913. The other most common rim technique during the 19th century was the applied lip, created by the use of the lipping tool. This technique dated from 1850 to 1913, and was phased out by the widespread use of the automated bottling machine.

### Other Containers

This category has been used to include all other types of artifacts that are used in the storage of food. These include bottle closures, metal cans and pull tabs, plastic wrappers and closures, and paper products. Most of this material is of recent deposition, although several categories within this group date to the 19th century. Among the latter are included several types of bottle closures. In 1855, Robert Arthur introduced the tin lid for canning jars. This consisted of an inverted tin disk sealed with melted glass. In 1858, the Mason jar was patented, along with its threaded zinc lid. However, the lid was not widely used until 1868, when the milk glass lid liner was invented. This is still being used today with a rubber seal. The lightning stopper for canning jars was most commonly used between 1875 and 1915. This closure consisted of a glass lid held in place against a rubber seal by a wire bail and lever. The crown closure, a crimped metal lid over a rounded lip, was first introduced in 1892. It is also still being used today, most commonly on soft drink and beer bottles (Lorrain 1968; Munsey 1970; Newman 1973; Paul and Parmalee 1973).

### Implements/Utensils

Artifacts included within this category include tableware (whether it is sterling silver, stainless steel, or plastic), can and bottle openers, drinking straws and swizzle sticks, and miscellaneous other utensils used in the preparation and consumption of food.

### Fast Food

The fast food industry, which actually began in the 1930s with the founding of the A&W chain, has played a profound role in the changing of modern American dietary habits. Created out a mass desire for ready-to-eat foods in an increasingly faster-paced world, the fast food industry is characterized either by totally biodegradable paper containers or by totally non-biodegradable styrofoam containers. Both were found in East St. Louis, although not in the numbers that were expected prior to the investigations. The majority of the materials recovered were either from McDonald's or from White Castle.



## Food Remains

By far the major constituent within this group has been butchered bone, although fruit pits, shells, and seeds were also recovered. Because of the limited analysis time available on this project, further identification of the food remains has not been conducted. This analysis, if done in the future, however, would provide invaluable information on the dietary habits of the sites' occupants through time. The majority of the food remains were recovered from the railroad dump, Illinoistown, the Tremont hotel site, and Bonnie's Tap. Surprisingly, the Kerr Island excavations revealed little in the way of food remains. It is not known if this is a function of the testing strategy, the disposal patterns at the site, or the consumption patterns of its occupants.

## STRUCTURAL GROUP

The Structural group is defined as being those artifacts that are directly associated with the built environment, although it does not include those material remains that were used to enhance the built environment. These have been subsumed within the Furnishings/Appliances group. The primary artifact classes within the Structural group are window glass, nails (wire, cut, or unknown nail type), building material, hardware, and utilities-related artifacts. On the whole, this functional group does not include many ambiguities in terms of assigning functions to particular artifacts.

## Window Glass

Possibly the only ambiguity involved in the Structural group is the assigning of function to small fragments of flat glass. Flat glass is primarily used in three different ways: as windows, as mirrors, or as glass table tops or shelves. Within the ESL classification system, hand-held mirrors or mirror fragments, if identifiable, have been assigned to the Personal group, while wall-mounted mirrors and glass tops or shelves have been subsumed within the Furnishings/Appliances group. Mirror glass and plate glass can generally be separated from window glass on the basis of thickness, the window glass being thinner than the other two. For this reason, all of the flat glass from the East St. Louis investigations was measured for thickness: glass that measured less than 3 mm thick was assigned to the Window Glass category, while glass over 3 mm thick was assigned to the Furnishings/Appliances group. Also useful in the identification of mirror fragments was the presence of the reflective backing, although one cannot assume that all mirror fragments still retain their backing. While this method of flat glass identification is not infallible, it does provide a consistent system for the assigning of function to flat glass fragments.

Once assigned to the Window Glass category, the flat glass fragments were also divided on the basis of color. In some cases, color identification can aid in assigning a particular function, such as would be the case for stained glass, smoked glass, or frosted glass.

## Nails

Nails can be divided into three discrete types, based on technological differences and historical context: wrought nails, machine-cut nails, and wire-drawn nails. Although wrought nails are still manufactured today for restoration purposes, their use as a primary fastener in construction ended around 1820; their primary period of use was in the 17th and 18th centuries (Nelson 1963). Wrought nails are made individually. They are characterized by a taper on all four sides, a hammered head, and a hammered point. They are further subdivided by length and function. No identifiable wrought nails were recovered during the East St. Louis investigations.

The first machine-cut nails were manufactured as early as 1790, although they did not totally replace wrought nails until around 1820 (Nelson 1963). Initially, machine-cut nails were headed by hand, but by 1815, the technology had improved to the extent that nails were machine-headed as well. Machine-cut nails characteristically possess two tapered sides and two straight sides. They have a square or blunt point, and a variety of head types can be found. They are subdivided by length and type of head, which indicate a functional difference.

In the 1850s, the United States was introduced to wire-drawn nails, which had been developed previously in Europe. The earliest wire nails were used in box construction and were not perfected for building construction until the 1870s. It was not until 1890 that wire nails replaced cut nails as the primary type of construction fastener, and even then cut nails continued to be preferred for certain types of construction well into the 20th century (Nelson 1963). These nails, which are still the most common type of fastener, are manufactured from steel wire. They are cylindrical, with a constant diameter, and have a sharp point. They are also subdivided on the basis of length (indicating pennyweight) and type of head (indicating function).

In the analysis of the nails from East St. Louis, they were first divided on the basis of manufacturing technique, and then subdivided on the basis of function. If the manufacturing technique could be discerned, but function was not readily apparent, the nails were listed as unknown wire or unknown cut nails. If they were broken, but the technique was discernible, they were listed as wire or cut fragments. If the manufacturing technique could not be identified because of heavy rust or corrosion, the nails were listed under unknown nail type.

## Building Material

The Building Material category includes those material remains that make up the mass of a structure or a construction project. The more common types of building materials are mortar, bricks and brick fragments, plaster, cement and concrete, wood, asbestos, tar paper, asphalt, and linoleum.

## Hardware

The types of artifacts included within the Hardware category are diverse, but all are characterized by being metal objects (other than nails) that are used in construction. The most common types of hardware found at East St. Louis



include nuts and bolts, screws, washers, tacks, spikes, hinges, latches, and hooks.

### Utilities

With the advent of indoor plumbing, the use of gas, and, later, electricity in the late 19th century, a new artifactual category was created. The artifacts associated with utilities range from plumbing fixtures (ceramic pipe, metal pipe fragments and fittings, or a drain plate) through artifacts associated with heating (flues, gas outlets) to electrical equipment (fuses, light bulbs, sockets and receptacles, wire, and insulators).

### FURNISHINGS/APPLIANCES GROUP

As stated earlier, artifacts not directly used in building construction, but still associated with the enhancement of the built environment, have been included within the Furnishings/Appliances group. These artifacts include flower pots and planters, light fixtures and lamp shades, plate glass and mirror glass, wall and shelf paper, paint, furniture and appliance parts, figurines, plastic flowers, and others.

### WEAPONRY GROUP

The Weaponry group includes primarily a variety of shells and cartridges of different calibers, although a pair of brass knuckles and a badly rusted old handgun were also excavated. No knives that could be directly associated with this group were found.

### CLOTHING/ADORNMENT GROUP

The artifacts included within this functional group are beads and jewelry; buttons, snaps, buckles, grommets, eyelets, zippers, and safety pins; shoe parts; barrettes; and fragments of clothing. Within this category, synthetic materials were used as a dating tool for the 20th century sites. In particular, it was noted on the analysis sheets if rayon (invented in 1910), nylon (introduced in 1938), or polyester (first used in 1941) was present at a site.

### PERSONAL GROUP

As stated earlier, the Personal group includes those artifacts that are directly associated with an individual or with individual use. Smoking-related artifacts, such as pipes, cigarette packs and filters, cigar tips, and match books, are included within this group. Health, hygiene, and first aid items include bandaids, eye droppers, syringes, medicine bottles, and pill boxes. Other artifacts that have been identified as belonging to the Personal group are charms, hand mirrors, cosmetic and perfume bottles, combs, hairpins, tax tokens, coins, and keys.

## ACTIVITIES GROUP

The artifacts included within the Activities group primarily fall into three categories: entertainment, stationery equipment, and tools and maintenance supplies. The entertainment category includes toys; musical instruments; radio-, phonograph-, and television-related artifacts; Christmas ornaments; and newspapers. Stationery-related artifacts recovered at East St. Louis include writing equipment, paper clips, glue jars, etc. Tools and maintenance supplies include clothespins, vacuum parts, tools, and painting equipment.

## TRANSPORTATION GROUP

Because of the importance of the transportation sector in the development of East St. Louis, it is only fitting that artifacts associated with transportation be afforded a separate functional group. The primary types of transportation-related artifacts recovered during the investigations included railroad spikes and automobile parts, especially battery parts. At National City, however, an entire windshield must have been broken right on the spot where one test unit was located, judging from the number of glass fragments recorded. Other less well represented artifacts include a valve, a rotor, muffler wire, a reflector, and an air brake part.

## FUNCTIONAL ANALYSIS RESULTS

The premise upon which this analysis is based is that broad cultural trends can be observed through the quantification of archaeological data. As Stanley South has stated, "The key to understanding culture process lies in pattern recognition" (1977:31). During the past decade, historical archaeologists have become increasingly aware of the importance of quantifying their data, and subsequently using that data to develop statements about behavioral variability. This has been most often accomplished through the use of frequency variation studies, such as the ones that have been conducted here.

In these analyses, the percentages of artifacts included within each functional group have been computed for specific proveniences. The results have then been compared between proveniences to determine if broader generalizations can be made about the deposition of cultural material at selected sites within the East St. Louis MARGE project area. On the basis of these comparisons, it has been possible to make several generalizations about the cultural processes that have acted in the creation of the archaeological record. It should be cautioned, however, that the East St. Louis sample is very small, and that further comparisons should be made to verify the observations made here.

## NATIONAL CITY

As stated in the testing chapter, the test units at National City were placed in three discrete areas of the residential lots: the front yard, the side yard, or the back yard, as well as in non-residential



areas. Six test units (T.U.6, T.U.7, T.U.9, T.U.12, T.U.18, and T.U.19) were placed in front yards, one test unit (T.U.14) was located in a side yard, eight units (T.U.3, T.U.4, T.U.5, T.U.8, T.U.10, T.U.11, T.U.17, and T.U.20) were placed in back yards, and the remaining five units (T.U.1, T.U.2, T.U.13, T.U.15, and T.U.16) were situated in non-residential areas.

When the total number of artifacts per functional group was added and the percentages computed for each of these four types of areas, several interesting observations came to light (Table 4 shows the actual figures that were derived from this comparison). For instance, it was discovered that the number of recovered ceramics was generally low throughout the National City excavations, and, as could be expected, was lowest in the non-residential areas (0.14%). Surprisingly, though, the highest frequency of ceramics (9.91%) was found in the side yard. This observation should be viewed with some skepticism, however, since only one test unit was excavated in a side yard area.

In contrast to the number of ceramics that was recorded, container glass was ubiquitous throughout the National City excavations. The highest percentage (51.13%) of container glass was found in the back yard group, with the second highest percentage (45.35%) in the non-residential areas. It is probable that this latter figure can be attributed to deliberate dumping or disposal behavior in abandoned lots. However, this assumption should be further tested. Overall, the frequency of occurrence for subsistence-related artifacts was highest for the back yard test units (62.41%). This supports the assumption that the primary locus of dumping and refuse disposal for the residential unit at National City was the back yard.

Within the structural group, the frequency of occurrence for window glass appears to have been highest for the front and side yard proveniences. It is possible to deduce from these figures that windows located at the front and side of a house were more liable to accidental and/or deliberate breakage than windows located at the rear of a structure. However, these figures may also be related to the number of windows on each side of a house. The extremely high percentage of building materials in non-residential areas may be attributed to the demolition of the church/school. The high percentage of utilities-related artifacts in non-residential areas is probably also related to this fact.

In observing the relationship between the subsistence group and the structural group within each provenience, it is apparent that the largest disparity occurs within the back yard provenience. Of all the artifacts collected within back yard test units, 62.41% were classified as subsistence-related, and 27.02% were included in the structural group. This probably represents the differential selection of an area for domestic refuse disposal. When these figures are compared to those for non-residential areas, however, it can also be observed that the demolition of a structure such as the church/school can also create an entirely different pattern than is found in areas where buildings are still standing. The figures for both the front yard and side yard proveniences are roughly equal between the subsistence and structural groups, thus possibly demonstrating no apparent selection of these areas for a particular use.

TABLE 4. Artifact Frequencies by Provenience for the National City Excavations.

	Front Yard		Side Yard		Back Yard		Non-Residential	
	#	%	#	%	#	%	#	%
SUBSISTENCE	1119	45.84	170	49.56	2407	62.41	1339	46.46
Ceramics	129	5.29	34	9.91	309	8.00	4	0.14
Container Glass	910	37.28	135	39.36	1972	51.13	1307	45.35
Container Other	25	1.02	1	0.29	64	1.66	26	0.90
Implements/Utensils	18	0.74	0	0	6	0.16	0	0
Fast Foods	4	0.16	0	0	6	0.16	0	0
Food Remains	33	1.35	0	0	50	1.30	2	0.07
STRUCTURAL	1187	48.63	164	47.82	1042	27.02	1501	52.08
Window Glass	678	27.78	83	24.20	447	11.59	205	7.11
Wire Nails	367	15.03	55	16.04	401	10.40	427	14.82
Cut Nails	0	0	1	0.29	0	0	0	0
Unknown Nail Type	0	0	0	0	0	0	0	0
Building Material	92	3.77	20	5.83	117	3.03	809	28.07
Hardware	40	1.64	3	0.88	69	1.79	13	0.45
Utilities	10	0.41	2	0.58	8	0.21	47	1.63
FURNISHINGS/APPLIANCES	31	1.28	2	0.58	14	0.36	19	0.66
WEAPONRY	2	0.08	1	0.29	7	0.18	0	0
CLOTHING/ADORNMENT	32	1.31	1	0.29	54	1.40	8	0.28
PERSONAL	41	1.68	2	0.58	21	0.54	7	0.24
ACTIVITIES	14	0.57	3	0.88	57	1.48	8	0.28
TRANSPORTATION	15	0.61	0	0	255	6.61	0	0
SUBTOTAL	2441	100	343	100	3857	100	2882	100
MISCELLANEOUS	206	X	14	X	165	X	219	X
NONIDENTIFIABLE	212	X	38	X	406	X	150	X
TOTAL	2859	X	395	X	4428	X	3251	X



Finally, from a comparison of the percentages for the personal group between the various proveniences, it might be concluded that a positive relationship exists between the front yard area and the disposal of artifacts included within the personal group. However, an examination of the artifact frequencies for individual test units within this group reveals that 21 of the 41 artifacts included within the front yard personal group were cigarette butts that were recovered from a single test unit. Clearly, the smoking behavior of a single individual and/or household has affected the results of this comparison. Another skewed percentage is the figure for the back yard transportation group. The high percentage (6.61%) here is totally attributed to the recovery of 255 pieces of windshield glass from a single test unit, thereby representing evidence of anomalous behavior rather than a cultural pattern.

#### KERR ISLAND

The Kerr Island units discussed in the previous chapter were placed in four discrete types of areas: the front yard, the side yard, the back yard, and within the foundations of a structure. Four test units (T.U.2, T.U.4, T.U.10, and T.U.21) were placed in front yard areas, three test units (T.U.22, T.U.23, and T.U.38) were placed in side yards, five units (T.U.1, T.U.3, T.U.9, T.U.14, and T.U.15) were located in back yards, and two units (T.U.8 and T.U.24) were situated within structures.

In comparing the results of the Kerr Island analysis (shown in Table 5) with the results of the National City analysis (Table 4), it can be observed that the front yard and back yard ratios between the subsistence group and the structural group are roughly the same between the two sites. This adds further support to the conclusions made in the discussion of the National City analysis and in the testing chapter that the back yard areas were being selected for deliberate disposal of household refuse, but that little evidence is available for differential selection of the front yard for particular uses.

The side yard ratio between the subsistence group and the structural group at Kerr Island, however, is markedly different than that computed for National City. At Kerr Island, the three test units excavated beside structures revealed a much lower percentage of ceramics and container glass than was recovered from the one side yard test unit at National City, and a much higher percentage of wire nails and hardware. It is difficult to interpret these figures, however, since only one side yard test unit was excavated at National City.

Examining only the figures for Kerr Island, it can be seen that, again, the number of ceramics recovered throughout the Kerr Island excavations was very low. On the other hand, the numbers of bottle glass fragments were very high throughout the site. The highest frequencies of bottle glass were found in back yard test units (63.28%), probably indicating deliberate household refuse disposal, and within structures (73.02%), possibly indicating either deliberate discard and/or accidental loss.

TABLE 5. Artifact Frequencies by Provenience for the Kerr Island Excavations.

	Front Yard		Side Yard		Back Yard		Within a Structure	
	#	%	#	%	#	%	#	%
SUBSISTENCE	777	41.31	255	26.23	3085	69.94	714	77.35
Ceramics	65	3.46	20	2.06	170	3.85	11	1.19
Container Glass	638	33.92	206	21.19	2791	63.28	674	73.02
Container Other	20	1.06	11	1.13	51	1.16	9	0.97
Implements/Utensils	1	0.05	0	0	4	0.09	1	0.11
Fast Food	0	0	0	0	0	0	0	0
Food Remains	53	2.82	18	1.85	69	1.56	19	2.06
STRUCTURAL	1050	55.82	691	71.10	1144	25.94	196	21.23
Window Glass	102	5.42	176	18.11	376	8.52	58	6.28
Wire Nails	548	29.13	377	38.79	369	8.38	106	11.48
Cut Nails	15	0.80	15	1.54	3	0.07	0	0
Unknown Nail Type	273	14.51	0	0	184	4.17	0	0
Building Material	97	5.16	52	5.35	166	3.76	22	2.38
Hardware	11	0.59	69	7.10	38	0.86	7	0.76
Utilities	4	0.21	2	0.21	8	0.18	3	0.33
FURNISHINGS/APPLIANCES	16	0.85	10	1.03	79	1.79	6	0.65
WEAPONRY	1	0.05	0	0	0	0	0	0
CLOTHING/ADORNMENT	17	0.90	3	0.31	56	1.27	1	0.11
PERSONAL	6	0.32	4	0.41	9	0.20	1	0.11
ACTIVITIES	5	0.27	4	0.41	20	0.45	2	0.22
TRANSPORTATION	9	0.48	5	0.51	18	0.41	3	0.33
SUBTOTAL	1881	100	972	100	4411	100	923	100
MISCELLANEOUS	56	X	67	X	383	X	36	X
NONIDENTIFIABLE	372	X	43	X	378	X	72	X
TOTAL	2309	X	1082	X	5172	X	1031	X



The highest percentages of window glass, wire and cut nails, and hardware were all from the side yard test units, especially Test Units 22 and 23. It is possible that these high figures represent either deliberate disposal of structural materials in the side yard or the previous locations of additions to the structures.

#### SUMMARY

While these analysis results are not extremely complicated in their assumptions and conclusions, they do represent an initial attempt at developing a 20th century urban artifact pattern. It is expected that further excavations and analysis will help to refine the observations made here, and will allow broader cultural generalizations to be made.





## VIII. SURVEY METHODOLOGY AND RESULTS

### INTRODUCTION

In conjunction with the East St. Louis MARGE testing project, several cultural resources surveys were undertaken by WAPORA at the request of the Illinois Department of Transportation. The purposes of the surveys were to identify and record all cultural resources within the areas of proposed development, to identify any potentially significant structures that might exist within those areas, to provide preliminary assessment of identified archaeological sites and standing structures in terms of significance as established for inclusion in the National Register of Historic Places, and to formulate recommendations for all sites and areas investigated.

The archaeological surveys were conducted in four discrete areas: the common TOFC (trailer on flat car) yard, the Centreville loop extension, a series of railroad grade separations, and several railroad interlocks. Also included were a B&O spur extension and four bridge approaches. All survey areas are located in a single, defined physiographic region: the American Bottoms, or floodplain, of the Mississippi River. However, the diversity of the natural and built environments within this zone is such that each survey area is unique. The natural and cultural transformations that have interacted to make up the contemporary landscape have not been homogeneous across the American Bottoms. To better understand the effect of these transformations on the archaeological record, each survey area will be considered independently.

### COMMON TOFC YARD

The common TOFC yard is an irregularly shaped tract of land encompassing approximately 700 acres. It is bordered by State Route 203 on the south and east, a Terminal Railroad Association track on the west, and a two-lane secondary road on the north (Figure 54). The proposed common TOFC yard lies within the channel remnant of the Horseshoe Lake meander of the Mississippi River, and the local landscape is concordant with river channel morphology and associated topographic features. The survey area was at one time bisected by Cahokia Creek, which was later channelized to alleviate ponding in the low areas of the former river bed. Indian Lake, an "L" shaped remnant of the channel meander, was situated in the southern end of the TOFC yard survey region until it was drained in 1909.

Several cultural features dissect this survey region: Cahokia Canal and associated drainage canals; State Route 203; light-duty access roads; a drag strip; and the old Alton, Granite, and St. Louis Traction Company embankment. Based on these cultural features and various topographically divided spaces, the common TOFC yard survey region was broken down into 17 independent reconnaissance sections (Figure 55).

### SECTIONS 1, 2, AND 3

These three sections did not contain any significant cultural resources and were later determined to be outside of the proposed common TOFC yard impact area.

#### SECTION 4

Section 4 is an agricultural field that was planted, at the time of the survey, in winter wheat (about 2 months old). Because the vegetation cover was still young, visibility was good and access was total. The eastern end of the section was a swampy area and subject to seasonal ponding. The field was walked in a series of transects, spaced at 10 meter intervals. Historic site W-761-3 was recorded in this section, but was determined to be the result of recent dumping activity. Prehistoric lithic material was observed on the sloping topographic contour that separated Section 4 from Section 5, but was assumed to have eroded from site W-761-5, which was bounded on the south by this sloping relief.

#### SECTION 5

This section is an agricultural field that had been harvested and plowed at the time of survey. Visibility was, therefore, good and coverage was total. The field was traversed by pedestrian transects spaced at 10 meter intervals. Historic dump sites W-761-2 and W-761-4 were located within this section, as was prehistoric site W-761-5 (see Site Descriptions for analysis and recommendations).

#### SECTION 6

Section 6 is composed mainly of an agricultural field and a small residential area. Immediately adjacent to the field and running behind the house lots was an automotive junk yard. Because of obstructed ground surface, this area was not surveyed. However, this inaccessible area composed less than 10 percent of Section 6. Within this section, one historic site, W-761-6, and two prehistoric isolated finds, W-761-A and W-761-B, were recorded. The 1954 U.S.G.S. Granite City 7.5' map indicates an intermittent stream running north-south between two ponded regions of the Horseshoe Lake meander remnant. This stream roughly parallels the Alton, Granite, and St. Louis Traction Company embankment, and is probably a consequence of the disrupted drainage pattern caused by construction of the embankment. This section was covered by pedestrian transects spaced at 10 meter intervals.

#### SECTION 7

Section 7 is an agricultural field that had been seeded just prior to the survey crew's inspection. The entire field was inspected by pedestrian transects spaced at 10 meter intervals. Visibility was very good and coverage total. Within this section site W-761-7 and prehistoric isolated find W-761-C were recorded.

#### SECTION 8

This section is an agricultural field that had recently been plowed and disked so that surface visibility was very good and coverage total. A pedestrian reconnaissance of this section revealed an extremely high density of historic material with the inclusion of several prehistoric artifacts as well. In some transects the density of historic cultural material reached 24 items per square meter. However, it was later determined through



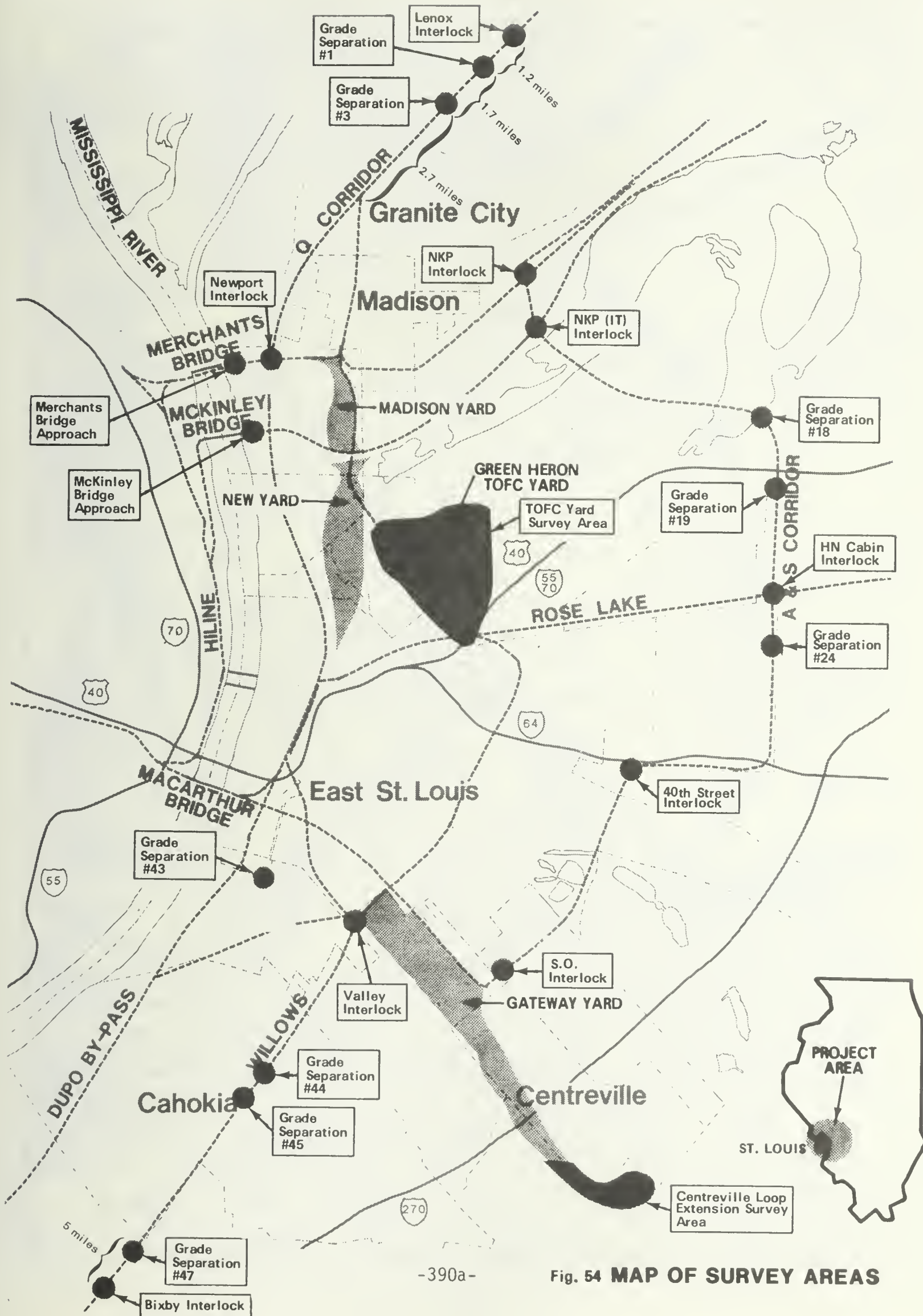


Fig. 54 MAP OF SURVEY AREAS





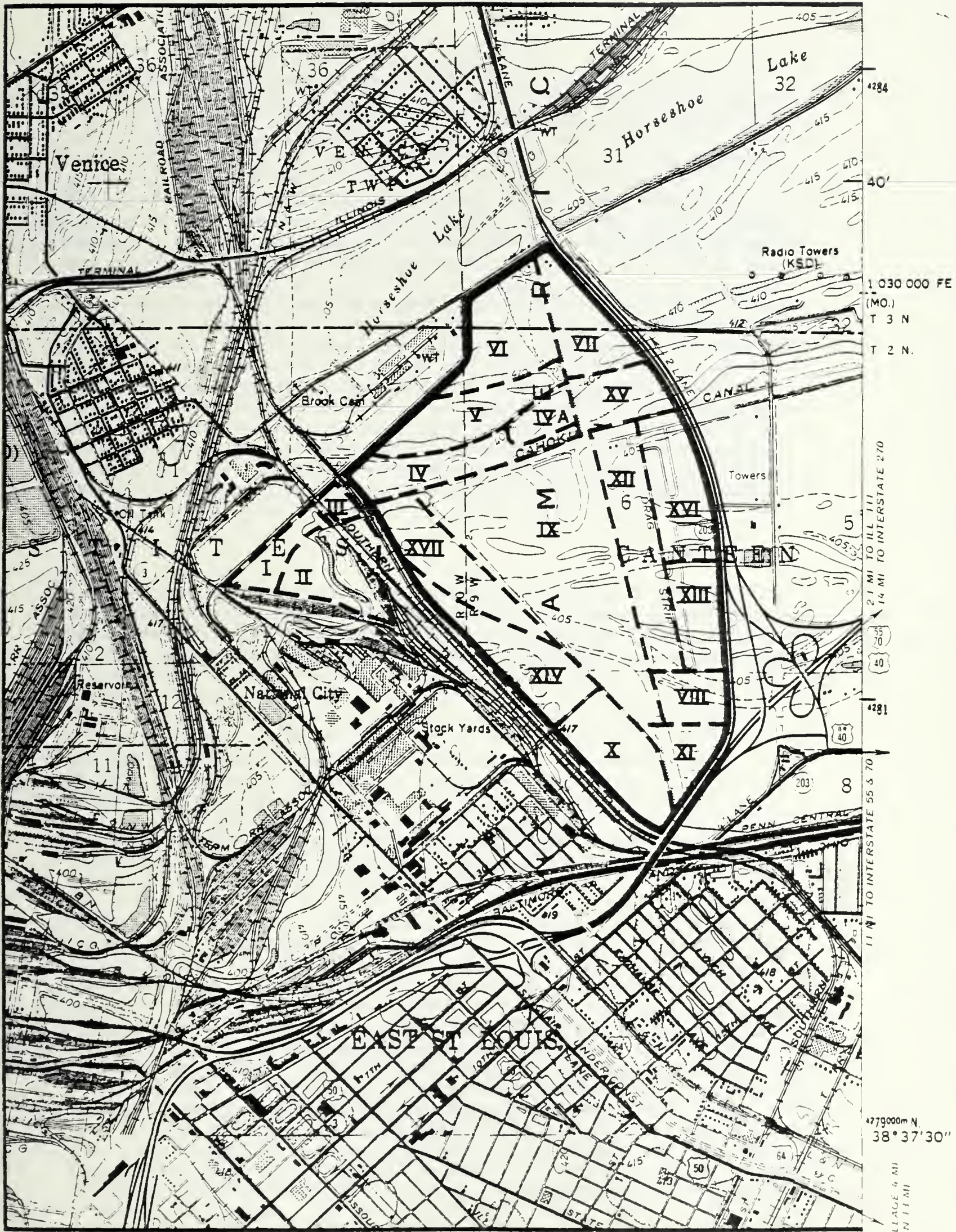


FIGURE 55. Common TOFC Yard Reconnaissance Sections.



literature review that the Section 8 area had once been under Indian Lake, which was drained in 1909, and that the high artifact density represented fill that was later dumped in the low areas.

## SECTION 9

Section 9 is a very large agricultural field bounded on three sides by Cahokia Canal and on the fourth by the Alton, Granite, and St. Louis Traction Company embankment. This section lies in a channel remnant of the Horseshoe Lake meander and is composed of ridge and swale topography. Historic material is ubiquitous, but of a low density throughout Section 9. Concentrations occur along the field edge near the embankment, and it appears that this material is either redeposited or has been dumped on the field. It does not represent an in situ historic site.

Within the ridge and swale topography of Section 9 are three areas of prominent elevation and one lesser ridge. Sites W-761-11, W-761-12, and W-761-13 occur on the three prominent ridges, and isolated find W-761-D is located on the minor ridge between sites W-761-11 and W-761-12. Whereas pedestrian inspection of Section 9 revealed historic material scattered indiscriminantly throughout the area, the prehistoric material was observed only on the ridge tops.

## SECTION 10

Section 10 was not surveyed because of the fact that it is currently being used as a public landfill and dump. However, the probability of historic or prehistoric sites existing below the refuse is very slight. This section was under the water of Indian Lake prior to its drainage in 1909.

## SECTION 11

This section was not inspected by the WAPORA survey crew because it is currently a partially filled swamp. The section of swamp in which dumping has occurred was heavily disturbed by Route 203 construction. However, the probability of a prehistoric or historic site occurring in the swamp is negligible. This is because of the fact that this section exists where Indian Lake stood before being drained in 1909.

## SECTION 12

Section 12 is an agricultural field located between the Alton, Granite, and St. Louis embankment and a drag strip. The majority of the field was newly planted in winter wheat with the northern quarter having been just recently plowed. Visibility of the ground surface ranged from fair to very good and coverage of this section by pedestrian transects was total. No sites were recorded in this section. However, a thin scatter of historic material was observed in the low areas. Since this section was at one time under Indian Lake, its low areas are susceptible to periodic ponding. It is assumed that the scatter of historic material in the low areas is a factor of periodic dumping and filling.



## SECTION 13

In size, shape, soil type and topographic settings, Section 13 is nearly identical to Section 12. It is located east of Section 12 between the dragstrip and Route 203. Section 13 is an agricultural field that was primarily planted in winter wheat. The northern quarter was fallow with soybean stubble obliterating the ground surface. Visibility of the ground surface ranged from poor to good. Coverage of this section by pedestrian transects was complete, and where visibility was low, the reconnaissance was augmented by a series of unstructured shovel cuts.

Historic material was homogeneously distributed throughout this section, with a density ranging from sparse to heavy. Much of the material was mixed with a cinder/clinker component. As in Section 12, the area of lowest topographic relief contained the greatest amount of historic cultural material. It is assumed that this pattern represents domestic dumping behavior, since architectural/structural artifacts represent only one percent of the material observed. Two prehistoric loci were also observed on the high relief areas of this section. Site W-761-14 was located on a small ridge used for access to the drag strip, and isolated find W-761-E was situated on an area of high relief that was probably an island in the Horseshoe Lake meander channel.

## SECTION 14

Section 14 is a mowed soybean field with surface visibility ranging from fair to poor. Pedestrian coverage of this section was total, but the implementation of rake backs and unstructured shovel cuts was necessary to expose the ground surface. The southwestern segment of this section was not inspected by the WAPORA survey crew because it was a swamp that bordered a public landfill operation. The likelihood of historic or prehistoric sites existing in this swamp is extremely low since, until recently (1909), it was below the waters of Indian Lake. Historic site W-761-17 is located in this section.

## SECTION 15

This section was not inspected by the WAPORA survey crew because it is composed of a swamp and a truck parts warehouse and junkyard. The truck junkyard has severely disturbed the drainage pattern of the swamp, which has caused ponding of the swamp waters. The junkyard itself is situated on a landfill within the swamp so that none of the original land surface is available for inspection.

## SECTION 16

This section is composed of the land that surrounds the drag strip complex. The original ground surface in this section is highly disturbed. Besides the drag strip, grandstand, office buildings, and pit area, there are paved parking lots and extensive areas where material is being dumped to fill low areas and to provide stable lots for overflow parking. Fields of tall grass surround the perimeter of this complex and it is possible that this represents an area of undisturbed ground surface. Visibility ranged from poor to zero, so that a series of unstructured shovel cuts was necessary to expose the ground surface. No sites were recorded for this section.

## SECTION 17

Section 17 was fairly densely planted in winter wheat, yet the growth was immature enough to result in fair surface visibility. In areas of poor visibility, the ground surface was shovel scraped for greater exposure. Historic material, believed to have been dumped, was observed near the railroad embankment, and historic site W-761-16 was located near a Cahokia Creek drainage canal. A prehistoric isolated find, W-761-F, two fragments of lithic debitage, was located on a slight knoll southeast of site W-761-16.

### SITE DESCRIPTIONS: COMMON TOFC YARD

A total of 12 sites and 6 isolated finds were located and identified during the reconnaissance survey of the common TOFC yard. Of the 12 sites, one (W-761-11) is a totally prehistoric site, six (W-761-2, W-761-3, W-761-4, W-761-6, W-761-16, and W-761-17) are historic sites, and five (W-761-5, W-761-7, W-761-12, W-761-13, and W-761-14) are multi-component prehistoric and historic sites. All of the isolated finds are prehistoric in nature. The following site descriptions and recommendations discuss each identified site in detail. The metric system is used for describing those sites that are primarily prehistoric, while the English system has been used in the description of primarily historic sites.

<u>Site Number:</u>	W-761-2
<u>Survey Region:</u>	Common TOFC Yard
<u>Reconnaissance Section:</u>	5
<u>Cultural Component:</u>	Historic

Site W-761-2 is an historic dump located at 410 ft MSL within Township 2N, Range 9W, Section 6, in the reconnaissance section 5 of the proposed common TOFC yard. The site occurs on the edge of a sloping fallow field that acts as a boundary between two agricultural fields. Material observed included: three-piece bottles, 55-gallon drums, jars, liquor bottles, tricycle parts, automobile parts, and refrigerator components. No artifactual evidence was collected, and field analysis determined that the material represents a temporal span inclusive of the mid- to late 20th century.

The location of this site, on a slope of 40°, would have made it unsuitable for the construction of a structure and, indeed, no structural material was observed. This site served as an area of deposition for discarded household items. Site W-761-6 is located approximately 400 meters to the north. Since W-761-6 was an historic habitation, there may be a functional relationship between these two areas of human activity. However, examples of both types of sites and their functional relationship are extant on the landscape, thus allowing for greater research potential than is intrinsic in this site. For these reasons, site W-761-2 does not appear to be eligible for nomination to the National Register of Historic Places and cultural resource clearance is recommended.



Site Number: W-761-2, continued

MATERIAL RECOVERED

Historic

None

\* \* \* \* \*

Site Number: W-761-3  
Survey Region: Common TOFC Yard  
Reconnaissance Section: 4  
Cultural Component: Historic

Site W-761-3 is an historic dump located within Township 2N, Range 9W, Section 6, in reconnaissance section 4. The site is situated in an area of second growth in the northwest quadrant of the Cahokia Canal and the Alton, Granite, and St. Louis Traction Company embankment intersection. Cultural material, including concrete blocks, tar paper, linoleum, glass fragments, wire spools, toilet and sink bowls, and 55-gallon drums of what appeared to be chemical waste, was observed but not collected. All material was recent 20th century and appeared to be the result of sporadic dumping. The site has no inherent research potential and therefore does not appear to be eligible for nomination to the National Register of Historic Places. Cultural resources clearance is recommended.

MATERIAL RECOVERED

Historic

None

\* \* \* \* \*

Site Number: W-761-4  
Survey Region: Common TOFC Yard  
Reconnaissance Section: 5  
Cultural Component: Historic

Site W-761-4 is an historic dump site located on the slope of the Terminal Railroad Association embankment within Township 2N, Range 9W, Section 6, in reconnaissance section 5. Observed material consisted of large bulky items such as washing machines, large pieces of metal, shattered glass bottles and containers, stoves, and refrigerators. It appears that the material was deposited as a result of dumping from the top of the railroad embankment within the last 25 years. Many abandoned rail spurs, embankments, and dead-end roads in the area provided access to secluded or vacant lots where refuse is dumped. This site is neither unique nor unusual in this respect, and is typical of a large number of similar sites in the vicinity of the project area. Therefore, site W-761-4 does not appear to meet minimum standards of eligibility for nomination to the National Register of Historic Places and cultural resources clearance is recommended.

Site Number: W-761-4, continued

MATERIAL RECOVERED

Historic

None

\* \* \* \* \*

Site Number: W-761-5  
Survey Region: Common TOFC Yard  
Reconnaissance Section: 5  
Cultural Component: Prehistoric and Historic

Site W-761-5 is located on a levee remnant north of old Cahokia Creek within Township 2N, Range 10W, Section 1, in reconnaissance section 5. The site is situated in an agricultural field bisected by Industrial Road, which runs north and south. Total extent of the site is approximately four acres, with one acre west of the road and three acres, including the historic component, to the east.

The site was observed during a pedestrian survey of the area. The survey was conducted at 10 meter intervals and since the field had been plowed, visibility was very good. A partial collection strategy was employed after the artifacts and site boundaries had been flagged and mapped. The density of prehistoric materials within the site was moderate, while the historic component was sparsely represented.

If function can be deduced from morphology, then observed material from this site represents a wide range of prehistoric human activity. Lithic debitage from post-decortification stages is present. However, chert cores are absent, thus inferring that primary decortification of potential lithic tools was completed away from this site. The projectile point/knives, along with the retouched and utilized flakes and scrapers, indicate the possibility of animal processing activities occurring within the site boundaries (Plate 75a). Material indicative of seed or nut processing, such as manos, metates, hoes or hoe flakes, and nutting stones, was absent.

However, two carbonized seeds were recovered from 30.5 mm below the plow zone in a shovel test. The incidence of fire cracked rocks in the vicinity of a discrete clustering of ceramic sherds might indicate the approximate location of a living area. Culturally diagnostic items within the collected material are sparse, though the single intact projectile point (a small, triangular, side-notched point), along with the shell, grit, and grog tempered sherds, is indicative of a Late Bluff-Mississippian occupation, probably a farmstead or hamlet.

Processes that are known to have disrupted the original deposition of prehistoric material include agricultural plowing to an observed depth of 25 cm below surface and the construction of Industrial Road, which bisects the western portion of the site. The historic material present at this site is sparse, and probably represents an incidence of discard with no



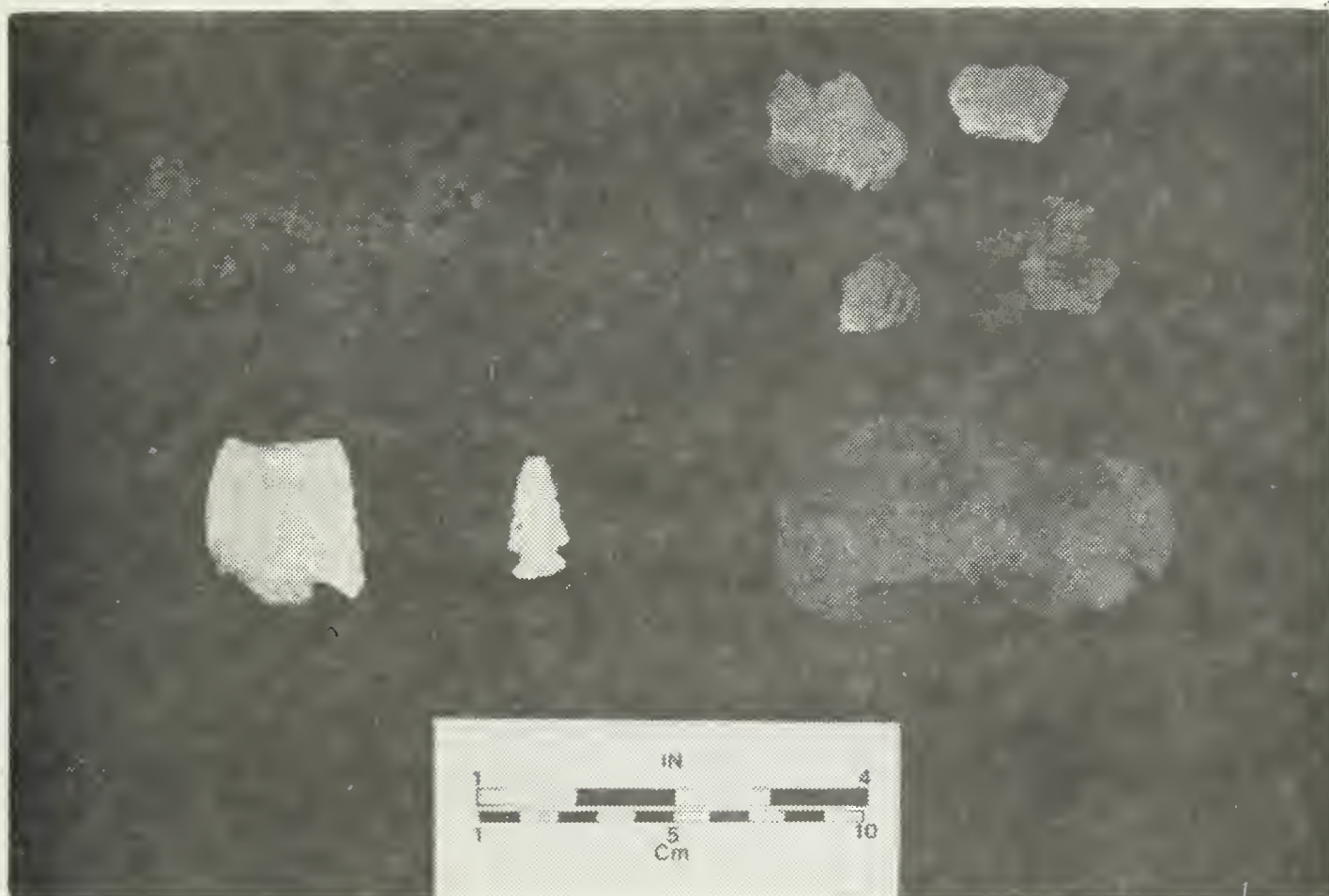


PLATE 75. A. Representative Artifacts from Site W-761-5, Common TOFC Yard.



PLATE 75. B. Representative Artifacts from Site W-761-11, Common TOFC Yard.

Site Number: W-761-5, continued

associated primary habitation or activity. Furthermore, historic maps do not indicate a structure built in this vicinity.

Two shovel tests and one auger test were placed within the confines of the site. The shovel tests were 60 cm x 60 cm square and all three tests reached a depth of 45 cm below surface. Plow zone disruption extended to a depth ranging from 25 to 37 cm below surface. No midden deposits or features were encountered; however, a bifacial thinning flake; a small, plain, shell tempered sherd; and flecks of charcoal were recovered from below the plow zone. These tests also revealed an intact soil matrix consistent with the Karnak and Riley soil series. These soils usually occur on floodplains and are alluvially deposited. Furthermore, the site lies at a soil type interface that indicates a former border between hardwood forest and grasslands.

The archaeological survey of the proposed FAI-270 alignment (Kelly et al. 1979) has identified a variety of types of sites in various environmental zones. In terms of a Late Woodland-Mississippian settlement pattern, these sites are analyzed in the context of their relationship to the nearest principal mound town. However, the proposed FAI-270 corridor does not intersect a major component of the American Bottoms Mississippian settlement system: the East St. Louis mound group (Figure 2). Other than archival information, very little is known about this mound group or its satellite communities since it was destroyed in the mid-19th century. Site W-761-5 is one of very few Mississippian sites spatially associated with the East St. Louis mound group (3 kilometers north) to have escaped destruction by urban development. It is unique in terms of its preservation as well as its potential for contributing information to the study of Mississippian culture in the American Bottoms. For these reasons, site W-761-5 appears to be eligible for inclusion in the National Register of Historic Places, and further work, in the form of controlled surface collection and test unit excavation, should be completed in order to request a determination of eligibility. The excavation of between five and ten 1 m square test units should be sufficient to determine the significance of this site.

#### MATERIAL RECOVERED

##### Prehistoric

- 2 projectile point/knives
- 6 retouched flakes
- 1 utilized flake
- 1 celt
- 1 angular shatter
- 34 bifacial thinning flakes
- 1 hammerstone
- 2 thick biface fragments
- 1 water worn pebble
- 2 shell tempered, plain body sherds
- 3 shell tempered, cord marked body sherds
- 2 grit tempered, cord marked body sherds
- 1 grog tempered, plain body sherd
- 1 shell and grit tempered, plain body sherd
- 1 water worn chert pebble



Site Number: W-761-5, continued

Historic

Subsistence Group

- 1 orange soft paste earthenware
- 1 differentially fired earthenware
- 1 hard paste porcelain sherd
- 1 ironstone sherd
- 1 porcelain sherd

Structural Group

- 4 bricks
- 1 enamelled particle board

MATERIAL OBSERVED BUT NOT RECOVERED

Prehistoric

- 2 hammerstones
- 1 end scraper
- 1 bladelet, distal end
- 4 biface fragments
- 9 utilized flakes
- 13 bifacial thinning flakes
- 4 decortification flakes
- 4 angular shatter
- 5 FCR (fire cracked rock)
- 1 shell tempered, cord marked body sherd
- 1 non-identifiable plain sherd
- 1 non-identifiable cord marked sherd

Historic

Subsistence Group

- 1 glass mug handle
- 3 whiteware sherds

Structural Group

- 14 bricks
- 1 limestone sherd

\* \* \* \* \*

Site Number: W-761-6  
Survey Region: Common TOFC Yard  
Reconnaissance Section: 6  
Cultural Component: Historic

Site W-761-6 is located within Township 2N, Range 10W/9W, Section 1/6, and occurs in reconnaissance section 6 of the proposed common TOFC yard

Site Number: W-761-6, continued

complex. An historic house was located at the edge of this field near a westerly curve in Industrial Road. A local informant, who owns the field, remembers the house being torn down several years ago but nothing more. Material indicating the existence of this structure was encountered during a pedestrian survey that included transects set at 10 meter intervals.

Artifactual evidence consisted almost entirely of red fired bricks splayed NE to SW in a 40 ft x 100 ft concentration. At the edge of the concentration was a pile of concrete slabs 20 ft x 80 ft in dimension that probably represented the structure's foundation. Other than building material, very little material that would indicate subsistence or other human activities was found. The artifactual evidence would seem to indicate the construction and habitation of this structure during the 20th century. Structures of this type are ubiquitous on the landscape and this site is not significant in terms of its inherent information potential. This site fails to meet minimal criteria needed to establish eligibility for nomination to the National Register of Historic Places. Cultural resource clearance is recommended for site W-761-6.

#### MATERIAL RECOVERED

#### Historic

##### Subsistence Group

- 1 liquor bottle, Thatcher Glass Manufacturing Co., 1900 to present
- 1 porcelain insulator
- 1 large metal hook

##### Structural Group

- 1 green painted spring
- 1 non-identifiable metal piece
- 5 large concrete pieces
- 1 brick
- 1 chunk of mortar

\* \* \* \* \*

<u>Site Number:</u>	W-761-7
<u>Survey Region:</u>	Common TOFC Yard
<u>Reconnaissance Section:</u>	7
<u>Cultural Component:</u>	Prehistoric and Historic

Site W-761-7 is a multi-component historic and prehistoric site, located within Township 3N, Range 9W, Section 31, and occurs in reconnaissance section 7 of the proposed common TOFC yard complex. The site was located by pedestrian survey that used transects at 10 to 15 meter intervals. The site is situated in an agricultural field that had recently been seeded with winter wheat. Visibility was very good and coverage was total.



Site Number: W-761-7, continued

Reconnaissance section 7 contained a ubiquitous low density scatter of historic artifacts. However, at one point in the field a very dense concentration of historic, with a small component of prehistoric, artifacts was observed. The concentration measured 100 ft x 400 ft, and stretched perpendicular to the frontage road that extends parallel to the limited access State Route 203. The prehistoric component was confined to an area 120 m x 213 m adjacent to the frontage road, construction of which presumably disrupted the site's integrity. Other than the incidence of artifacts found at this location, no other geomorphic or cultural features coincide with the site. It should also be noted that, in proportion to the number of subsistence-related historic artifacts, the frequency of structural material is extremely low and negligible.

An informant indicated that a runoff ditch ran perpendicular to Route 203 before it was improved, and emptied into the field approximately where the artifactual material was observed. An auger test within the site boundaries revealed a Riley clay loam profile with plow zone interface occurring at 1.0 ft below surface. It is possible that if the informant was correct and a shallow runoff ditch was previously located in this area, then a small amount of fill, containing cultural material, could have been used to level the field. Since the amount of fill needed to level a runoff ditch would be negligible, the episode of filling would not necessarily be evident in a single profile after being churned by plowing. It is also possible, however, that an intact site existed near this incidence of cultural material, and that the appearance of surficial material in this area is because of erosion from plowing and field drainage.

The prehistoric component is small and probably represents a campsite or procurement location near the backwaters of Horseshoe Lake. The site has been impacted by agricultural activity as well as construction of the frontage road. Since site W-761-7 is sparse and heavily disturbed, it does not appear to qualify for nomination to the National Register of Historic Places, and cultural resource clearance is recommended.

#### MATERIAL RECOVERED

##### Prehistoric

- 6 bifacial thinning flakes
- 1 retouched flake
- 1 large utilized flake, trapezoidal cross section
- 2 angular shatter, limestone

##### Historic

###### Subsistence Group

- 91 ironstone sherds
- 2 creamware sherds
- 26 soft paste porcelain sherds
- 1 clear glass container base, "Owens" (until 1929)
- 1 clear glass container base

\* \* \* \* \*

<u>Site Number:</u>	W-761-11
<u>Survey Region:</u>	Common TOFC Yard
<u>Reconnaissance Section:</u>	9
<u>Cultural Component:</u>	Prehistoric

Site W-761-11 is a prehistoric site within Township 2N, Range 9W, Section 6, in reconnaissance section 9 of the proposed common TOFC yard. It is situated on a small ridge in an area of ridge and swale topography that at one time was the southern chute of the Mississippi River's Horse-shoe Meander. Site W-761-11 is one of three sites within Section 9 that share very similar artifactual, morphological, and topographical characteristics.

Within the ridge and swale topography of Section 9, there are three major, and one minor, ridges. On each major ridge is situated a prehistoric site. The sites are all closely coterminous with the level surface of the ridgetops (i.e., no material was found to have eroded downslope). Furthermore, there is a distinct soil change between the soil on the ridge crests and the soil on their slopes. Cultural material was observed to be coincident with the better drained, light brown clayey sand near the centers of the ridges, rather than with the organically enriched, dark brown sandy clay on the ridge edges and slopes.

Two 45 cm x 60 cm shovel tests, arbitrarily placed in the site, revealed an intact soil matrix with plow disruption occurring to a depth of 30 cm below surface. No midden or cultural features were encountered and no artifactual material was recovered from below the plow zone. The ground surface of sites W-761-11, W-761-12, and W-761-13 was planted in winter wheat, allowing fair to good surface visibility.

Specifically, site W-761-11 covers about 2800 m<sup>2</sup> on a ridgetop composed of the Landes fine sandy loam soil type. This soil was formed in loamy and sandy alluvial matter under grasses on the Mississippi River floodplain and is extremely erosion resistant (USDA 1978:32). The site occupies high ground that would have overlooked a backwater channel remnant of the Horseshoe Meander near what was historically known as Indian Lake. The artifactual evidence includes fire cracked rocks and ceramic sherds that were collected from a central area, 15 m in diameter, around which was collected scattered lithic debitage, retouched chert flakes, and sandstone metate fragments (Plate 75b). The presence of a shell tempered, red slipped, and a grog tempered, incised sherd would indicate a Late Bluff/Mississippian occupation. The recommendations for this site, as well as for site W-761-12, are included in the discussion of site W-761-13.

#### MATERIAL RECOVERED

##### Prehistoric

- 3 retouched flakes
- 2 sandstone metate fragments
- 3 angular shatter
- 9 bifacial thinning flakes
- 3 sandstone FCR



Site Number: W-761-11, continued

1 plain shell tempered sherd with extruded lip and exterior red slip  
1 plain grog tempered incised sherd

\* \* \* \* \*

Site Number: W-761-12  
Survey Region: Common TOFC Yard  
Reconnaissance Section: 9  
Cultural Component: Prehistoric and Historic

Site W-761-12 is a prehistoric and historic site within Township 2N, Range 9W, Section 6, in reconnaissance section 9 of the proposed common TOFC yard. This site is located on a ridge in an area of ridge and swale topography that formerly was the southern chute of the Horseshoe Meander. At the time of its prehistoric occupation, this ridge would have been a place of high ground, after the Horseshoe Meander of the Mississippi River was closed to the main channel (i.e., pre-900 B.P.) (Munson 1974:391). However, the immediate environment would have had characteristics similar to those defined by Zawacki and Hausfater (1969) for their "floodplain lakes, ponds, and sloughs" environmental zone.

According to Zawacki and Hausfater (1969:47-55), this general environmental zone would have provided a diverse array of vegetation, including nine food plants of major dietary importance. Considering these potential food plants, the period of maximum harvest abundance would have occurred between August and November. Furthermore, the Mississippi River corridor serves as one of the major flyways for migratory waterfowl in North America (Bellrose 1968:3), thus a high variety and density of waterfowl would have been available in the spring and fall. Roper (1979:73), noting work done by Parmalee, Paloumpis, and Wilson (1972), points out that fish contributed a significant portion of the Illinois Woodland diet, and that possibly the aquatic resources were being harvested from backwater ponds and sloughs.

Site W-761-12 occupies the majority of the ridgetop on which it is situated. The areal extent of the site is about 4180 m<sup>2</sup> or 45 m x 90 m. The cultural material collected included artifacts representing lithic production, food processing, and cooking or storage (Plate 76a). However, no fire cracked rocks were observed at this site. The total of eight ceramic sherds included seven grit tempered and one limestone tempered sherd. All the sherds were very small and generally non-identifiable in terms of stylistic traits, though one sherd had a red painted exterior surface. On the basis of the ceramic and environmental data, it is assumed that this site represents a locus of Late Bluff procurement and possible habitation activity.

Historic material is also present at site W-761-12. However, historic debris was observed as being ubiquitous in reconnaissance section 9. The artifact pattern is indicative of household dumping where subsistence and personally related items are by far the largest component, and structural materials are virtually absent. For this reason site W-761-12 is not considered to have a primary historic component.



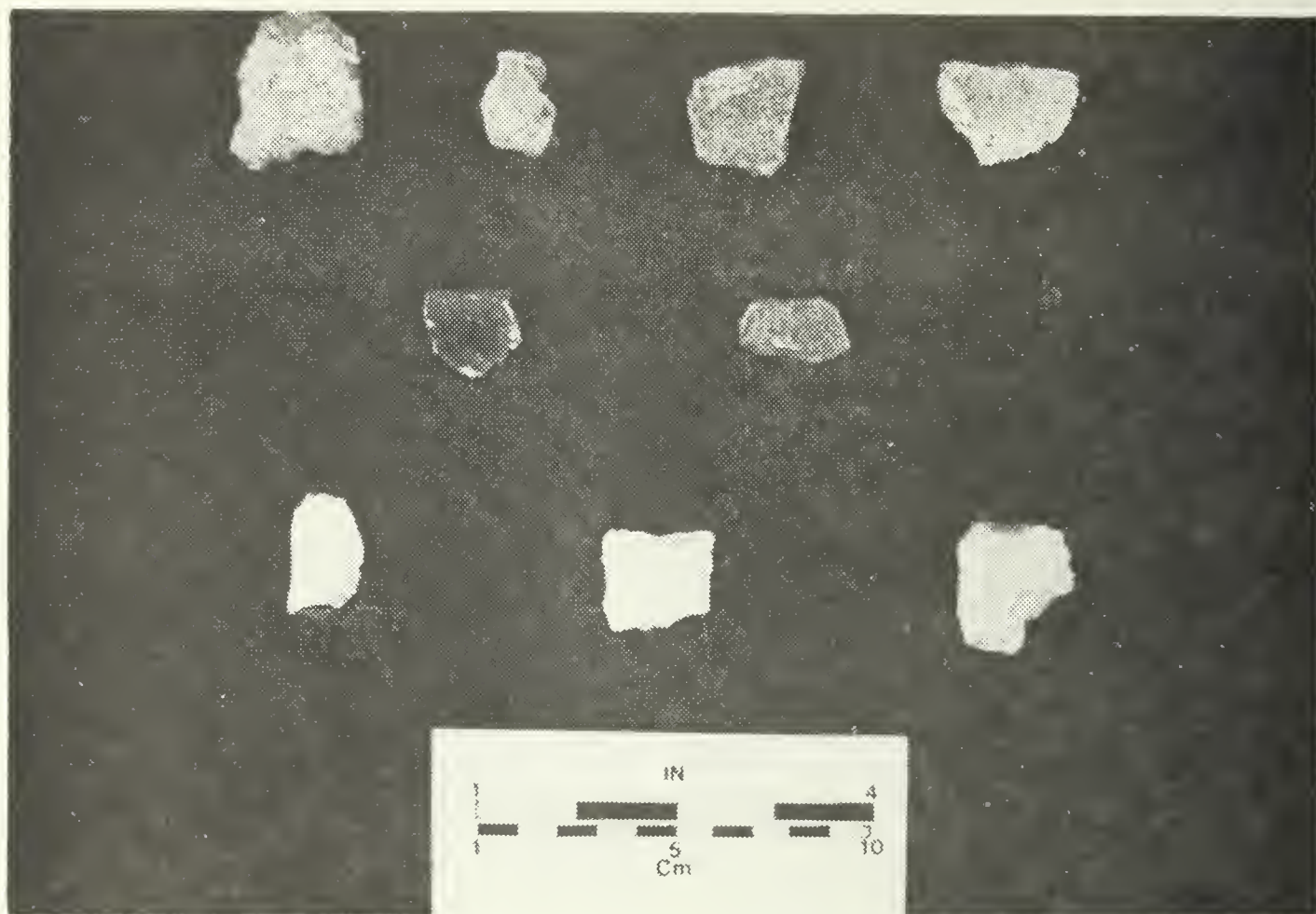


PLATE 76. A. Representative Artifacts from Site W-761-12, Common TOFC Yard.



PLATE 76. B. Representative Artifacts from Site W-761-13, Common TOFC Yard.



Site Number: W-761-12, continued

Recommendations for site W-761-12 are included in the discussion of site W-761-13.

#### MATERIAL RECOVERED

##### Prehistoric

- 1 thin biface
- 1 retouched flake
- 1 blade section
- 1 thick biface
- 11 bifacial thinning flakes
- 3 angular shatter
- 1 grit tempered, plain sherd
- 1 grit tempered, red painted sherd
- 1 limestone tempered, cross-hatched with incising sherd
- 2 grit tempered, fabric impressed sherds
- 1 grit tempered, extruded lip sherd
- 2 grit tempered, cord-marked sherds

##### Historic

- 2 clinkers
- 1 stoneware sherd

\* \* \* \* \*

<u>Site Number:</u>	W-761-13
<u>Survey Region:</u>	Common TOFC Yard
<u>Reconnaissance Section:</u>	9
<u>Cultural Component:</u>	Prehistoric and Historic

Site W-761-13 is a historic and prehistoric site within Township 2N, Range 9W, Section 6, in reconnaissance section 9 of the proposed common TOFC yard. The site is situated on a ridge within an area of ridge and swale topography. Its locational and environmental characteristics are identical to those previously described for sites W-761-11 and W-761-12. The cultural material recovered, though, is more diverse and of a greater density than that observed for sites W-761-11 and W-761-12.

Elements representing lithic production, hunting/animal processing, floral resource processing, cooking and storage, and possibly personal adornment were recovered (Plate 76b). Discrete clusterings of artifacts were observed within the site boundaries. The clusterings consisted of fire cracked rock fragments in proximity to lithic debitage. Between these clustered areas the density of artifacts was much lower. Within the site's boundaries of 5570 m<sup>2</sup>, or 60 m x 90 m, three such clusterings were noticed. The inclusion of shell tempered ceramic sherds and two hoe flakes in the artifact assemblage would indicate a Late Bluff/Mississippian occupation at this site. Munson (personal communication 1981) has noted that the raw material of one of the hoe flakes, navaculite, is unique in the American Bottoms to Mississippian assemblages.

Site Number: W-761-13, continued

Since this site occupied an aquatic or marshlike environment prehistorically (see sites W-761-11 and W-761-12), it cannot be readily assumed that the presence of hoe flakes would indicate a farmstead. If, however, it is considered that "polish" on chert flakes may be due to the harvesting of grasses, as well as to hoeing activity, then this site might also represent a locus of procurement. In addition to edible plants, the backwater marsh areas would have provided sedge, blue vervain, and marsh grass (Kul-finski 1973), possibly used in the manufacture of baskets, mats, and other woven items.

The historic material was recovered only from within the boundaries of the prehistoric component of site W-761-13. As noted for site W-761-12, historic materials were ubiquitous throughout Section 9 and are probably representative of household dumping. A 1954 U.S.G.S. 7.5' quad map indicates a light duty road terminating in reconnaissance section 9. The land is now actively plowed for agricultural purposes and the roadbed no longer exists. It is, however, quite possible that this dead-end road formerly served as access to a refuse dumping area. The roadbed did not directly impact prehistoric sites W-761-11, W-761-12, and W-761-13.

A single 45 cm x 60 cm shovel test was located within the site boundaries to determine the depositional format of the site's soil matrix. Below the plow zone, which reached a depth of 27 cm below surface, an intact soil matrix displaying the characteristics of the Landes fine sandy loam soil type was found. This is the same soil constituent on which sites W-761-11 and W-761-12 are located. This soil type is very erosion-resistant, and had its genesis on sandy or loamy alluvial soils under grasses of the Mississippi River floodplain. The single test pit did not encounter any cultural features or materials below plow zone.

Because of the environmental setting that is assumed to have existed at the time sites W-761-11, W-761-12, and W-761-13 were aboriginally occupied, it is inferred that all three sites represent areas inhabited while procuring subsistence or manufacturing resources. As previously noted (see site W-761-12 for details), sites W-761-11, W-761-12, and W-761-13 are situated in an area that would have provided easy access to marsh grasses as well as waterfowl, fish, and other aquatic subsistence resources. Because of the fragile nature of artifactual assemblages associated with procurement camps, very few such sites exist to be recorded by contemporary researchers. This is especially true with Mississippian sites in the American Bottoms. Furthermore, until recently, the research potential of such "unspectacular" sites was not recognized in the shadow of the Cahokia mound complex.

Current emphasis now recognizes the value of interpreting sites and settlement patterns within a systematic framework. Sites are no longer isolated by the static analysis of their artifactual components. Rather, a new interpretation demands that networks of functionally and morphologically differentiated sites be considered in terms of how they relate to one another in a cultural system.



Site Number: W-761-13, continued

The proximity of sites W-761-11, W-761-12, and W-761-13 to site W-761-5 and the now destroyed East St. Louis mound group makes it possible to consider inferences bearing on their interrelationships. Considered alone, sites W-761-11, W-761-12, and W-761-13 have the potential for answering questions concerning Mississippian procurement activities, the diachronic relationship of similar sites within the same microenvironment, and so on. Considered on the regional level, the possible relationship of sites W-761-5, W-761-11, W-761-12, and W-761-13 to the former Mississippian center in East St. Louis offers insight into a cultural system whose components are now all but obliterated by the urban landscape. Further testing is definitely needed at sites W-761-11, W-761-12, and W-761-13 to determine if their inherent information potential is capable of sustaining the kinds of re-search questions that would make them eligible for nomination to the National Register of Historic Places. This testing should take the form of controlled surface collection and test unit excavation. Between 10 and 15 1 m test units should be excavated at each site.

#### MATERIAL RECOVERED

##### Prehistoric

- 2 decortification flakes
- 11 angular shatter
- 62 bifacial thinning flakes ( 10 percent heat altered)
  - 1 projectile point
  - 1 projectile point, distal end
  - 2 thin biface fragments
- 10 retouched flakes
- 4 utilized flakes
- 3 lamellar blade fragments
- 2 hoe flakes, one navaculite
- 8 FCR, burnt limestone
- 1 possible adze midsection
- 1 sandstone abrader
- 1 possible gorget fragment
- 1 shell fragment
- 1 grog tempered rim sherd
- 3 shell tempered, external slip sherds
- 2 limestone tempered, cord-marked sherds
- 3 grog tempered, cord-marked sherds
- 1 grog tempered, plain sherd
- 1 grit tempered, cord-marked sherd
- 3 non-identifiable cord-marked sherds, very small

##### Historic

###### Subsistence Group

Container Glass:

- 5 milk glass
- 15 clear glass

Site Number: W-761-13, continued

- 4 lime green glass
- 1 green milk glass
- 2 pale orange glass
- 1 brown glass
- 1 light purple glass
- 1 aqua glass

Container Other:

- 2 milk glass cap liner fragments

Ceramics:

- 51 ironstone sherds
- 26 porcelain sherds
- 3 earthenware sherds
- 1 stoneware sherd

Implements/Utensils:

- 1 metal spoon
- 1 metal spoon fragment
- 1 table knife blade

Structural Group

- 1 roofing slate fragment
- 1 porcelain fuse
- 1 plastic electric outlet
- 1 porcelain faucet knob
- 1 light green window glass

Furnishings/Appliances Group

- 1 clay flowerpot sherd
- 3 porcelain figurine sherds

Weaponry Group

- 1 plastic 12 gauge shotgun shell casing

Activities Group

- 1 milk glass marble

Personal Group

- 2 milk glass cosmetic container fragments
- 3 clear perfume bottles
- 1 blue bottle
- 1 amber bottle
- 1 brown bottle



Site Number: W-761-13, continued

Miscellaneous Group

14 clinkers  
1 aluminum fragment  
1 light blue plastic fragment

\* \* \* \* \*

Site Number: W-761-14  
Survey Region: Common TOFC Yard  
Reconnaissance Section: 13  
Cultural Component: Prehistoric and Historic

Site W-761-14 is a prehistoric and historic site within Township 2N, Range 9W, Section 6, in reconnaissance section 13 of the proposed common TOFC yard. The site is situated on a slight ridge similar in its topographic characteristics and environmental situation to sites W-761-11, W-761-12, and W-761-13. However, the ridgetop is now bisected by a gravel field access road located next to the entrance of a nearby dragstrip.

During a pedestrian survey of Section 13, a moderate scatter of prehistoric lithic and historic artifacts was observed and collected from a field access road near the dragstrip's entrance. As indicated for sites W-761-11, W-761-12, and W-761-13, the ridge on which site W-761-14 is located would have been an area of high ground proximal to the backwaters of the meander remnant. However, the occurrence of artifactual material was limited to and coterminous with the boundaries of the roadbed surface. The road bordered a plowed field to the south and no cultural material was observed in that field. It is therefore assumed that the observed artifacts represent an incidence of road gravel being borrowed from an area of prehistoric activity at another location. The historic material may be explained similarly or be the result of casual discard. Site W-761-14 is not intact and appears to be redeposited surface material. The site does not appear to be eligible for nomination to the National Register of Historic Places, and cultural resource clearance is recommended.

MATERIAL RECOVERED

Prehistoric

10 chert angular shatter  
59 bifacial thinning flakes, 9 heat altered  
1 thick biface  
6 retouched flakes  
5 utilized flakes

Site Number: W-761-14, continued

Historic

Subsistence Group

6 porcelain sherds  
1 ironstone sherd  
1 yellowware sherd

Structural Group

1 common 10d nail

Personal Group

1 1900 dime

Weaponry Group

1 55 caliber lead shot

Miscellaneous

1 shell fragment

\* \* \* \* \*

<u>Site Number:</u>	W-761-16
<u>Survey Region:</u>	Common TOFC Yard
<u>Reconnaissance Section:</u>	17
<u>Cultural Component:</u>	Historic

Site W-761-16 is an historic habitation site located in an agricultural field within Township 2N, Range 9W, Section 6, in Section 17. A 1954 U.S.G.S. 7.5' quad map indicates a building located in approximately the same place where the pedestrian survey recorded a light density of historic artifacts. The observed artifacts represent a broad range of functional groups, including food remains and subsistence-related glassware and ceramics, utensils, furnishings, and structural materials. Also observed at the site were numerous fragments of dark green, plastic garbage bags.

The structure indicated on the 1954 map is no longer in existence. Since so few structurally related artifacts were observed at this site, it is possible that after demolition of the existing structure, all remnants were simply pushed several yards down the bank and into Cahokia Canal. Datable artifacts indicate that this site was occupied after World War II. Because the site is surficial and heavily disturbed, it does not appear to be eligible for nomination to the National Register of Historic Places. Cultural resource clearance is recommended for site W-761-16.



Site Number: W-761-16, continued

MATERIAL RECOVERED

Historic

Subsistence Group

Container Glass:

14 clear glass fragments  
1 whole clear bottle  
2 brown glass fragments  
1 milk glass fragment

Ceramics:

1 yellowware sherd  
2 ironstone sherds  
2 porcelain sherds

Food:

1 peach pit  
22 butchered mammal bones

Container other:

1 plastic wrapper  
1 aluminum can

Utensils:

1 pot handle, metal  
1 utensil handle, plastic

Structural Group

Utilities:

1 porcelain insulator

Building Materials:

2 asphalt roof shingles  
3 concrete fragments

Furnishings Group

1 porcelain decorative object, fragment

\* \* \* \* \*

<u>Site Number:</u>	W-761-17
<u>Survey Region:</u>	Common TOFC Yard
<u>Reconnaissance Section:</u>	14
<u>Cultural Component:</u>	Historic

Site W-761-17 is an historic habitation site within Township 2N, Range 9W, Section 6, in reconnaissance section 14 of the proposed common TOFC yard. The site is located at the extreme northwest corner of what was, prior to its draining and subsequent partial filling, Indian Lake. This lake was formed from the ponded waters of the Horseshoe Meander remnant, and where filling has not been carried out, its low areas are either seasonally saturated or retain marshlike characteristics. Site W-761-17 occupies a relatively high portion of ground on the margin of a water-saturated area composed of tall grasses and reeds.

Site W-761-17 is composed of several associated structures and cultural features (Plate 77a). The main structure consists of a one room frame building with an attached shed. A fenced yard separates the living room area from a small tack shed in which harnesses and plowing gear are stored. At a greater distance south and east of these buildings are a tool shed, chicken coop, and hog pen. Further to the north and east are small fields planted with corn, beans, and squash as well as a demolished fire brick structure and an outdoor privy. An embankment and tracks of the Terminal Railroad Association create the site's western boundary.

Datable material collected from the site indicates that it was probably inhabited between 1930 and 1970. It is now abandoned, but the stage of deterioration indicates that the site was probably utilized until recently (i.e., within one to two years). Evidence also suggests that this site may still be used intermittently since a crop had been planted but not harvested in the nearby plots. This complex of structures is very similar in its components and layout to other itinerant homesteads constructed from salvaged materials on "dead" space along railroad lines and near their yards. These types of sites are identifiable throughout the proposed MARGE project area, and have been discussed in greater detail in previous chapters. For these reasons, and because site W-761-17 is not a unique example of this type of site, it does not appear to be eligible for nomination to the National Register of Historic Places. Cultural resource clearance is recommended for site W-761-17.

#### MATERIAL RECOVERED

##### Historic

##### Brick Outbuilding

##### Subsistence Group

##### Container Glass:

- 4 green glass fragments
- 5 clear glass fragments
- 2 brown glass fragments
- 2 milk glass fragments
- 1 2-piece bottle neck and lip





PLATE 77. A. Common TOFC Yard, Site W-761-17.



PLATE 77. B. Representative Artifacts from Site W-761-19, Centreville Loop Extension.

Site Number: W-761-17, continued

Container other:

2 plastic wrappers

Ceramic:

1 ironstone sherd

Structural Group

5 fire brick fragments

1 fire brick with exterior glaze

3 red brick fragments

Clothing-Adornment Group

1 piece rubber shoe

Furnishings/Appliances Group

1 light green plate glass fragment

Miscellaneous

1 mussel shell fragment

4 slag

1 mammal long bone

House-Barn Area

Subsistence Group

Container Glass:

2 clear glass fragments

1 relish bottle

Container other:

1 milk glass cap liner

Ceramics:

5 ironstone sherds

1 stoneware sherd

1 porcelain sherd

1 earthenware sherd

Food:

1 butchered mammal bone



Site Number: W-761-17, continued

Transportation Group

1 tractor spark plug

Miscellaneous Group

3 mammal bones

2 Christmas greeting cards

General

Subsistence Group

Container Glass:

1 brown glass

1 pale orange glass

1 pale green glass

5 clear glasses

Implements/Utensils Group

1 sterling silver fork (1847 Rogers Bros.)

Structural Group

Utilities:

1 glass pole insulator

1 porcelain insulator fragment

\* \* \* \* \*

CENTREVILLE LOOP EXTENSION

The Centreville loop extension is an irregularly shaped tract of land and right-of-way corridor located near the base of the bluff, southeast of Centreville. This tract of land is roughly bordered by Harding Ditch on the west, the Illinois Central tracks on the south, and State Routes 157 and 13 on the north.

The Centreville loop survey region lies entirely within the former Grand Marais meander channel of the Mississippi. The remnant oxbow lake was known as Pittsburgh Lake until it was drained in 1909. The proposed loop extension corridor, which parallels the existing Illinois Central Gulf rail line, runs across an area of ridge and swale topography that is part of the Grand Marais point bar formation. The loop area lies directly in the meander channel remnant, with its eastern edge crossing an alluvial fan formation where Powdermill Creek enters the floodplain from its uplands origin.

This survey region was divided into eight individual reconnaissance sections on the basis of natural and cultural features or constraints (Figure 56). These divisions were helpful both in determining efficient inspection procedures, and in analyzing the types of depositional transformations that bear on the quality of the archaeological record.

#### SECTION 1

Section 1 is an agricultural field that lies within the ridge and swale topography of the Grand Marais point bar. The field was harvested and plowed just prior to the survey, with little or no crop stubble remaining on the surface. Ground surface visibility was very good and coverage of the field was total. Inspection by the WAPORA survey crew was performed through a series of pedestrian transects spaced at 10 meter intervals. Only a few scattered items of historic material were observed and no sites were located within this section.

#### SECTION 2

This is a residential section that is composed of small salt-box and ranch-style homes constructed within the past 50 years. The backyards of the houses in this section abut the existing ICG rail lines. Because this is a residential area, inspection of the ground surface was limited to unused portions of back and side yards where shovel cuts were permitted, and visual inspection of any bare ground surface. No sites were located in this section.

#### SECTION 3

Section 3 is an agricultural field that lies south of the ICG tracks and abuts the western boundary of Section 2. This section lies within the eastern extreme of the Grand Marais point bar. The eastern terminus of Section 3 is State Route 157, which skirts the margin of the final channel scar left by the Grand Marais meander. The western edge of SR 157 is currently occupied by five structures. If any prehistoric occupations had existed along the western channel margin at this point, they would have been disturbed or destroyed by contemporary construction patterns.

Surface visibility in the field west of the buildings was good since it had recently been disked and planted. Coverage of the field was total and no sites were located in this section.

#### SECTION 4

This section was determined to be outside of the survey area. No sites were located.

#### SECTION 5

Section 5 is an agricultural field within the channel remnant of the Grand Marais meander. It had been a fallow field and was cut just prior to the arrival of the WAPORA survey crew. The ground surface was unbroken and largely obscured by crop stubble. However, some bare strips of ground were available for inspection, and rake-backs placed periodically in pedestrian transects provided for the observation of a greater surface area.



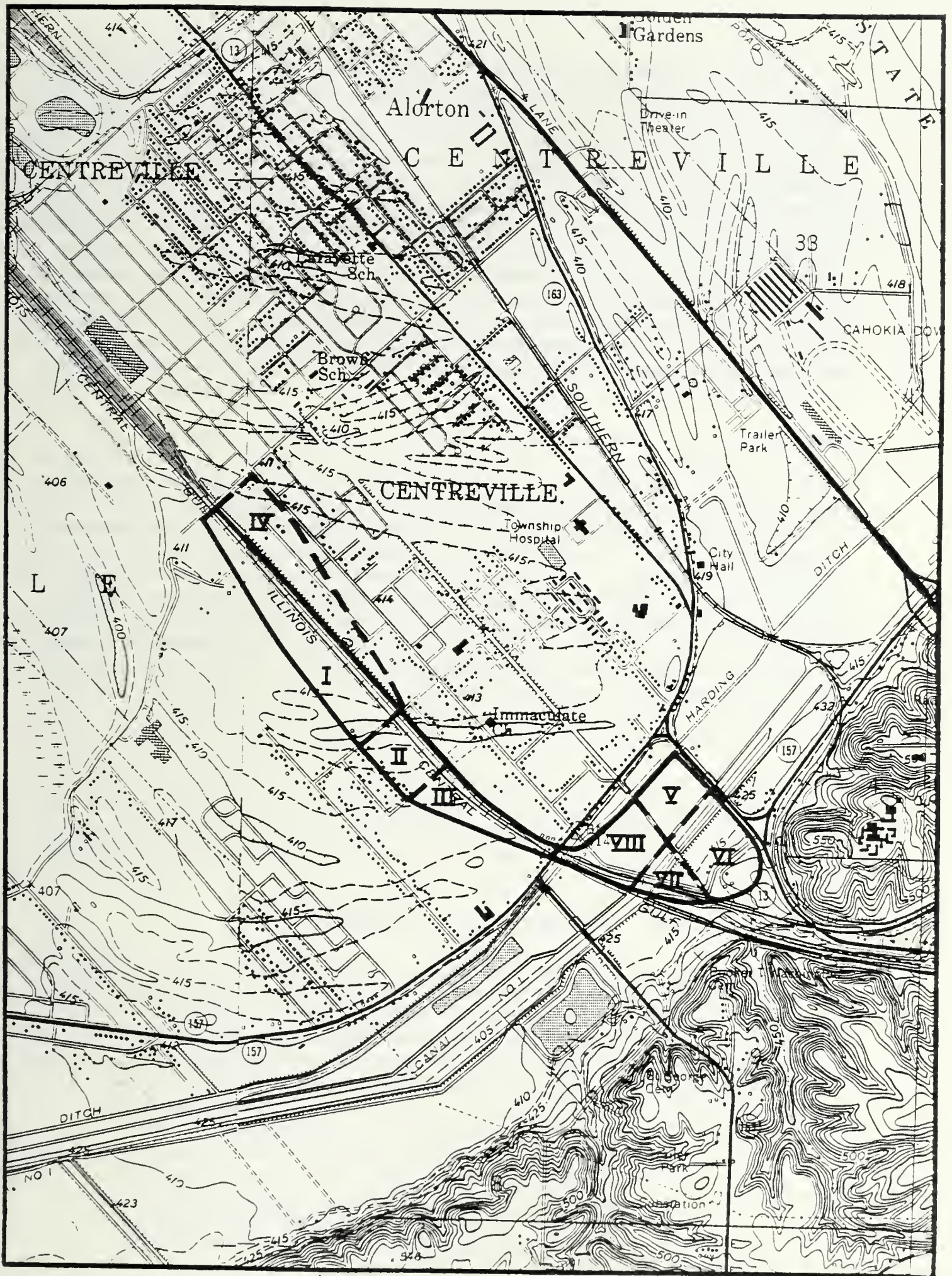


FIGURE 56. Centreville Loop Extension Reconnaissance Sections.



Denny (1974) reports that site S-17, located by Grimm in 1947, is located in this general area. The site maps at the Illinois State Historic Preservation Office indicate that site S-17 is situated in the western corner of Section 5 just east of the intersection of Harding Ditch and an abandoned railroad embankment. Surface inspection of this area located several mussel shell fragments but no prehistoric cultural material. A series of unstructured shovel cuts were also unsuccessful in locating the site. Finally, a .75 square meter shovel test was placed in the vicinity of the site, as located by the SHPO's map. Plow zone reached a depth of 3 cm below ground surface. However, at 4 cm below surface, a stratum of cinders and clinkers was observed extending past a depth of 6 cm below surface. The ground surface, then, had to have been redeposited on fill that was placed in the remnant of Pittsburgh Lake. Therefore, site S-17 must be either incorrectly located on the SHPO's map, or its material originated in redeposited top soil.

## SECTION 6

Section 6 lies east of Harding Canal No. 1 and cuts across the toe of an alluvial fan created at the point of Powdermill Creek's entrance onto the floodplain. This section has been disturbed by the construction of several features: four houses, a railroad embankment, a tertiary road, and several outbuildings. The majority of Section 6 is a fallow agricultural field in which visibility ranged from good to poor. Sites W-761-8 and W-761-9 were located during inspection by pedestrian transects spaced at 10 meter intervals. Historic site W-761-20 is located south of prehistoric site W-761-19, which was found through a series of unstructured shovel cuts along the base of the alluvial fan.

## SECTIONS 7 AND 8

Sections 7 and 8 are fallow agricultural fields separated by an abandoned and filled section of Harding Canal No. 1. This section also lies entirely within the channel remnant of the Grand Marais meander. Pedestrian inspection and a series of unstructured shovel cuts did not locate any sites in this section.

## SITE DESCRIPTIONS: CENTREVILLE LOOP EXTENSION

The following site descriptions are for those sites that were located and recorded during survey of the proposed Centreville loop extension. Four sites were recorded during the survey, all of which are located in Section 6. Of the four sites, one is a single-component prehistoric site (W-761-19), one is a single-component historic site (W-761-20), and two are multi-component prehistoric and historic sites (W-761-8 and W-761-9). The following pages provide detailed descriptions of these four sites.



Site Number: W-761-8  
Survey Region: Centreville Loop Extension  
Reconnaissance Section: 6  
Cultural Component: Prehistoric and Historic

Site W-761-8 is a multi-component historic and prehistoric site located within Township 1N, Range 9W, Section 4. The site is situated in reconnaissance section 6 of the proposed Centreville loop extension. Site W-761-8 occurs in two segments. Segment A is located on a small rise that is presently used as a small household garden plot. The ledge on which this segment of the site is situated, and on which the nearby house and road were constructed, is the leading edge of an alluvial fan formed by Powdermill Creek. Both historic and prehistoric material were observed in this section. Segment B is downslope from Segment A and is located in a field drainage area of partially mowed soybeans. Segment B contains only historic artifacts.

The garden plot, Segment A, exclusively contains fragments of subsistence-related historic artifacts, as does Segment B, except for two cold cream jars. This type of artifact assemblage might be expected as representative of trash-composting behavior in a small garden plot. Since the material collected in Segment B of the site is both downslope from and contains functionally similar types of artifacts as Segment A, the possibility of erosional deposition must be raised. The very minor prehistoric component of Segment A may be related to site W-761-19, which is an intact prehistoric site situated about 100 meters to the southeast on the upper crest of the Powdermill Creek alluvial fan. Erosional forces and disruption because of road construction could have deposited the material further downslope. Since the site is sparse and lacks contextual integrity, no further investigation is warranted. Site W-761-8 does not appear to be eligible for nomination to the National Register of Historic Places and cultural resource clearance is recommended.

#### MATERIAL RECOVERED

##### Prehistoric

2 bifacial thinning flakes

##### Historic

###### 8A Subsistence:

2 hard paste porcelain sherds  
8 soft paste porcelain sherds  
4 ironstone sherds  
3 earthenware sherds  
1 milk glass fragment  
2 amethyst bottle glass fragments, 1880-1917  
1 clear pressed bottle glass, 1880-present  
2 aqua bottle glass fragments  
1 brown bottle glass fragment  
1 dark green bottle glass fragment

Site Number: W-761-8, continued

Miscellaneous:

- 1 mammal bone fragment
- 2 shells
- 1 black plastic fragment, 20th century

8B Subsistence:

- 8 soft paste porcelain sherds
- 17 ironstone sherds, clear lead glaze
- 1 aqua blue partial base, embossed (Geo. Schroeder), 1885-1920
- 1 amethyst fragment, 1880-1917
- 1 partial milk glass closure

Personal:

- 2 milk glass cold cream jars, 1903-present

\* \* \* \* \*

<u>Site Number:</u>	W-761-9
<u>Survey Region:</u>	Centreville Loop Extension
<u>Reconnaissance Section:</u>	6
<u>Cultural Component:</u>	Prehistoric and Historic

Site W-761-9 is composed of both historic and prehistoric components, and is located within Township 1N, Range 9W, Section 9. The site occurs in reconnaissance section 6 within the proposed Centreville loop extension. Topographically, the site is situated on the leading edge of an alluvial fan deposited by Powdermill Creek. The site is also adjacent to the former Grand Marais meander of the Mississippi River.

Both historic and prehistoric artifacts were observed during a pedestrian reconnaissance of this section. The site exists in an agricultural field that had remained fallow for the previous season. Surface visibility alternated between good and fair where patches of the field had not been mowed. The historic material was scattered with a moderate to heavy density across an area of 1860 m<sup>2</sup>. The prehistoric material, of low to moderate density, occurred in a more restricted area of about 560 m<sup>2</sup>. A general surface collection of all cultural material was made after the site's perimeter had been mapped.

Analysis of the recovered historic material reveals that all the artifacts are representative of a subsistence-related function, and that no structural material, except two window glass fragments, is present. A local informant indicated to the survey crew that about 60 years ago a house, described as 19th century in style, was torn down in this vicinity. However, neither the artifactual nor the archival evidence corroborate this statement. The observed artifact pattern would more likely be representative of household dumping behavior.



Site Number: W-761-9, continued

The depositional context of the prehistoric material may be secondary in nature. That is, the fact that its present locus is a result of primary use or discard behavior is suspect. The eastern boundary of the site is an artificial one and consists of a two lane road constructed along the toe of the Powdermill Creek alluvial fan. At an elevation 10 to 20 ft above this road and at a distance of about 30.5 m to the east exists prehistoric site W-761-19. It is possible that site W-761-9 is a downslope component of site W-761-19. Yet, it is more likely that erosion from or disruption of site W-761-19 by construction activities displaced some cultural material from its point of original deposition. This does not represent an intact cultural deposit and therefore does not appear to be eligible for nomination to the National Register of Historic Places. Cultural resource clearance is recommended for site W-761-9.

#### MATERIAL RECOVERED

##### Prehistoric

- 1 triangular projectile point/knife
- 2 biface fragments
- 1 thumbnail, uniface scraper
- 1 retouched flake
- 2 FCR, sandstone
- 1 sandstone, unburned
- 1 shallow notch, retouched spoke shave
- 2 decortification flakes
- 5 chert angular shatter
- 12 bifacial thinning flakes
- 9 shell fragments

##### Historic

- 1 porcelain figurine
- 2 light green window glass fragments
- 1 amethyst glass fragment, 1880-1917
- 1 clear bottle base, 1880-present
- 1 piece clear bottle glass, 1880-present
- 1 light green bottle glass fragment
- 2 earthenware sherds
- 4 soft paste porcelain sherds
- 1 hard paste porcelain sherd
- 1 stoneware sherd
- 1 ironstone sherd

\* \* \* \* \*

<u>Site Number:</u>	W-761-19
<u>Survey Region:</u>	Centreville Loop Extension
<u>Reconnaissance Section:</u>	6
<u>Cultural Component:</u>	Prehistoric

Site W-761-19 is a prehistoric site within Township 1N, Range 9W, Section 9, in reconnaissance section 6 of the proposed Centreville loop

extension. The site, composed of a Late Woodland and possibly a Middle Woodland component, is situated on the broad, level toe of an alluvial fan created by the discharge of Powdermill Creek from the uplands onto the Mississippi River floodplain. The Grand Marais Meander of the Mississippi River, stopped in its eastward progression by the erosion-resistant bluffs, would have controlled a myriad of subsistence-/and settlement-related factors, either as an active channel or as a backwater meander remnant. Because of the proximity of this site to the former channel, it is probable that the site was inhabited after the channel ceased as an active meander.

The site was brought to the attention of the survey crew by a local informant. She stated that, even though the field had not been plowed for many years, when agriculturally active, it yielded an extensive amount of prehistoric artifacts to a friend who collected "relics" throughout the area. Her identification of the site was verified when 70 percent of the unstructured shovel cuts yielded prehistoric cultural material (Plate 77b). A 60 cm x 45 cm shovel test revealed an intact Fayette silt loam soil type below a plow zone that extended 30.5 cm below surface. This is a very gently sloping soil with slight erosion hazard, which was formed in thick silty material under a hardwood forest along the upland bluffs of the Mississippi River (USDA 1978:23). The shovel test extended to a depth of 60 cm below the ground surface, and encountered charcoal flecks, one fragment of chert debitage, and several small fragments of burnt sandstone below the plow zone. Ground surface visibility was very poor and the extent of the site could not be determined. The positive shovel cuts, however, covered an area of approximately 930 m<sup>2</sup>.

Factors that might have contributed to the post-depositional context of this site included: the construction of a nearby 19th century house (site W-761-20), construction of Four Corners Road along the toe of the alluvial fan, recent construction of a nearby nightclub, and agricultural plowing. Plow disruption can be ascertained to have had a direct impact on the site's integrity. However, the nearby construction projects probably impacted only the site's periphery if indeed the site extends beyond the broad base of the alluvial fan. This is doubtful.

Because the site is situated on an alluvially-deposited feature and because shovel testing revealed cultural material occurring below the plow zone, there is a high probability that intact cultural features exist at this site. Based on scant ceramic data, this site possibly contains a Middle Woodland component. If indeed a Middle Woodland occupation occurred at this site, its topographic situation coincides with a synthesis of the Middle Woodland settlement models described by Struever (1968) and Asch et al. (1978). Struever (1968) indicates that Middle Woodland base camps are likely to occur near the bluff base midway between the diverse upland and lowland resources. Asch et al. (1978) argue that proximity to a large slackwater body, or to the entrance of a secondary stream onto the main floodplain, are high priority settlement determinants. The topographic aspects of site W-761-19 occur with all three locational criteria described for Middle Woodland base camps.

The main centers of Middle Woodland culture are located outside the American Bottoms in the Ohio and Illinois River valleys. Munson (1971) and Harn (1971) note a concentration of Middle Woodland sites in the northern



Site Number: W-761-19, continued

section of the American Bottoms, but south of that area only "a thin scatter of settlements" exist (Kelly et al. 1979:25). Benchley (1975:22) feels that, in terms of a regional research perspective, questions devoted to explaining the unexpected lack of Middle Woodland sites in the St. Louis area deserve a high priority.

If site W-761-19 contains intact Middle Woodland culture deposits, its potential for contributing to the explanation of regional cultural development would be high. Therefore, further testing is recommended to determine this site's eligibility for nomination to the National Register of Historic Places. This testing should include shallow disking, controlled surface collection, and the excavation of between 10 and 15 1m<sup>2</sup> test units, although another approach to the investigation of this site might be through controlled stripping, mapping of features, and excavation of a representative sample.

#### MATERIAL RECOVERED

##### Prehistoric

- 1 angular shatter
- 5 bifacial thinning flakes (one water worn)
- 11 FCR: 4 burnt limestone, 7 burnt sandstone
- 1 grog tempered, cord-marked sherd
- 1 grog tempered, cord-marked lip sherd
- 2 limestone tempered, obliterated cord-marked sherds
- 1 grog tempered, plain sherd
- 1 grog tempered, cord-marked sherd
- 1 grit tempered, obliterated cord-marked sherd

\* \* \* \* \*

Site Number: W-761-20  
Survey Region: Centreville Loop Extension  
Reconnaissance Section: 6  
Cultural Component: Historic

Site W-761-20 is a standing historic farmhouse and associated out-buildings located in Township 1N, Range 9W, Section 9, in reconnaissance section 6 of the proposed Centreville loop extension. The site is located on the broad, level toe of an alluvial fan created by the discharge of Powdermill Creek from the uplands onto the Mississippi River floodplain. It is situated on the east side of a dirt road that extends between the Illinois Central Gulf main tracks and State Route 13. Site W-761-20 is located directly northeast of prehistoric site W-761-19.

Architecturally, this complex of buildings represents an initial settlement in the area during the late 19th century, and continued modification and reuse of the site until recent years. The only extant structures that appear to have been original are the house (Plate 78a) and the carriage house (Plate 78b). The brick house is two stories high, with a gabled roof and a limestone rubble foundation. Semi-elliptical brick relieving arches crown each of the windows on the front and the back, and a





PLATE 78. A. Centreville Loop Extension, Site W-761-20, Front Facade of House.



PLATE 78. B. Centreville Loop Extension, Site W-761-20, Carriage House.



Site Number: W-761-20, continued

decorative brick frieze runs the length of the eaves. The 3-bay structure originally had two interior gable-end chimneys with fireplaces. One of the chimneys has since been removed. A 1-story frame, shed-roof porch extends the length of the front facade. The rear of the house has had an addition of paving stones and frame built onto it, and an attached garage has also been built in recent years. The house has been extensively altered, both inside and out.

The 1-story brick carriage house has a gable roof and a limestone rubble foundation. The brick forge and attached crank bellows is still in place, indicating that some blacksmithing was done at this site, probably for home use. The other farm structures include three barns of recent vintage, with concrete floors and foundations, and a superb example of "Late Hippie" style architecture (Plate 79a). This structure, which consists of a concrete block base, and a balloon-frame superstructure covered with chicken wire and concrete, is not a giant anthill nor is it an ancient Druidic ruin. It is the remains of a wind-powered grist mill that was probably built by a "back-to-the-land" group of creative individuals. Much of the machinery is still in place inside the windowless structure (Plate 79b).

This example of a common 19th-century farm site has been extensively altered through time, and, as such, does not appear to meet the criteria for inclusion in the National Register of Historic Places. Also, by strict definition, the windmill does not qualify for inclusion by virtue of its recent age. However, there is a strong possibility that there is not another structure in the world like this one, and it seems a shame that it will be destroyed without being completely recorded. Therefore, it is requested that a complete photographic documentation of this structure be completed prior to its destruction.

#### MATERIAL RECOVERED

##### Historic

None

\* \* \* \* \*

#### GRADE SEPARATIONS

A total of nine grade separations were investigated during the survey (Figure 54). All of the grade separations were similar in shape, with triangular sections in each of the four quadrants formed by the railroad and highways. Each of the investigated areas was considered to extend 60 feet from the shoulder of the road at its intersection with the railroad track, and to taper to 0 feet at a point approximately 750 feet from the intersection of rail grade and road.

While many of the areas contained structures, including houses, churches, warehouses, and business establishments, only those structures that appeared



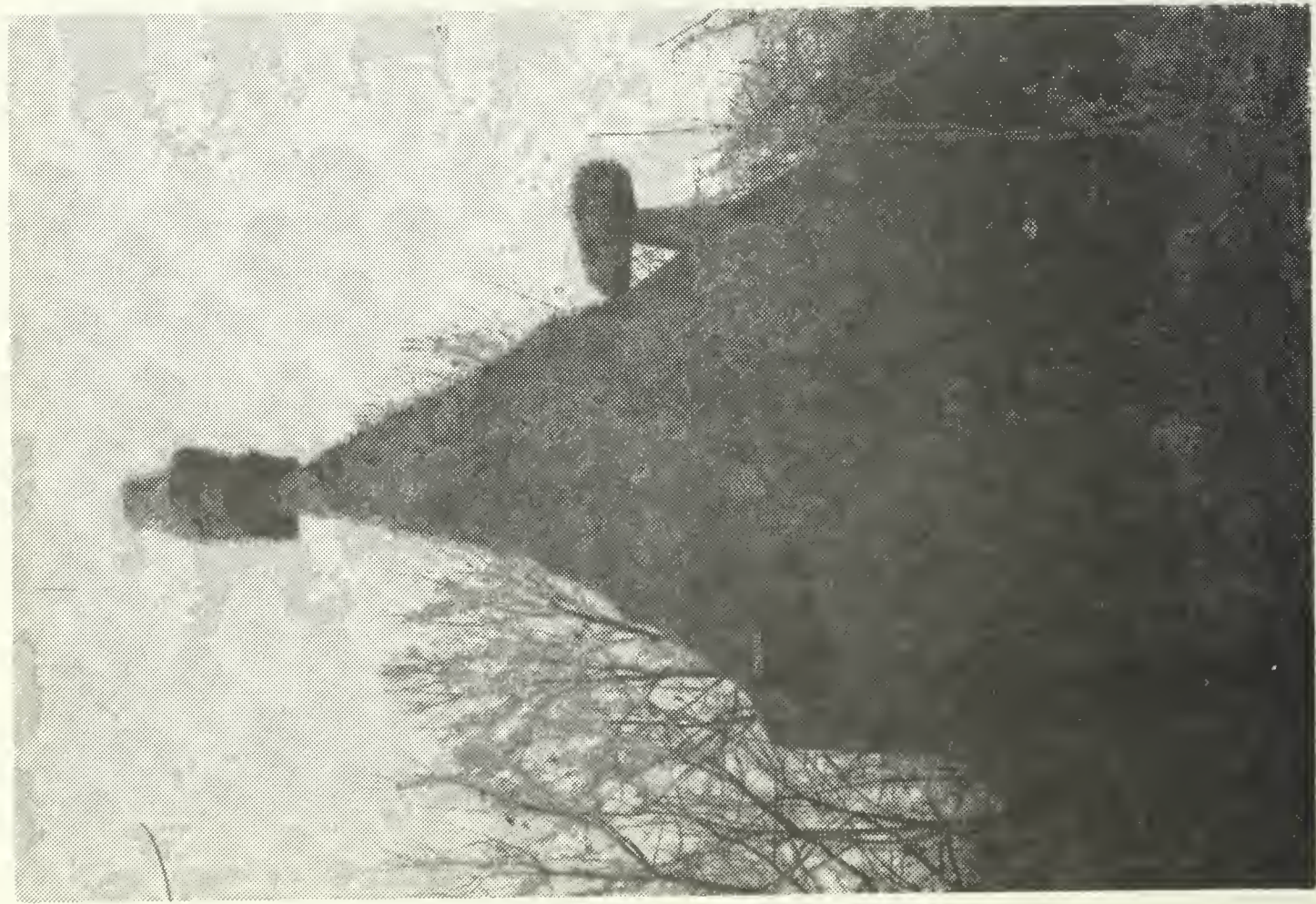


PLATE 79. A. Centreville Loop Extension, Site W-761-20, Windmill.



PLATE 79. B. Centreville Loop Extension, Site W-761-20, Entrance to Windmill.



to meet the minimum age criterium (50 years) for inclusion in the National Register of Historic Places will be discussed. All non-structural sites, whether historic or prehistoric, will be considered, and recommendations will be made where possible.

#### GRADE SEPARATION #1

Grade Separation #1 is located north of Granite City, at the crossing of four sets of tracks and Maryville Road. A small historic site dating to the 20th century was observed in the northwest quadrant. However, because of the recent date and heavily disturbed nature of the site it does not appear to be eligible for inclusion in the National Register of Historic Places, and no further work is recommended. Cultural resource clearance is recommended for Grade Separation #1.

#### GRADE SEPARATION #3

This grade separation is located in Granite City where Pontoon Road crosses four sets of tracks. No archaeological sites or potentially significant structures were noted at the separation. Cultural resource clearance is recommended for Grade Separation #3.

#### GRADE SEPARATION #18

Located east of Canteen Lake, where State Route 111 crosses the Alton and Southern Railroad, is Grade Separation #18. Illinois site Ms 588 is situated on a ridge of the Edelhart Lake meander point bar formation north-east of this intersection. The site, previously recorded by Norris (1975) during the Horseshoe Lake State Park archaeological survey, contains a multi-component Late Bluff/Mississippian occupation. On the basis of ceramic data, the three components identified by Norris (1975) include Jarrot, Fairmount, and Sterling phase materials.

The material collected during the pedestrian survey of Grade Separation #18 probably relates to an extension of site Ms 588 (Plate 80a). However, the locus of observed material and the main body of site Ms 588 lie outside the area to be impacted by the proposed construction of Grade Separation #18. Even though the site will not be impacted by the proposed construction, its potential research contributions deserve mention.

In the Horseshoe Lake area, the Jarrot phase (A.D. 800-900) is represented by 39 sites, 24 sites represent the Fairmount phase (A.D. 900-1050), and only 3 sites representing a Sterling phase (A.D. 1050-1150) occupation are identified (Norris 1975:10). One of these sites is Ms 588. This drastic reduction in numbers of sites during the Sterling phase occurred at a time when Monks Mound had been completed, and the Cahokia site had reached a period of cultural florescence (Fowler and Hall 1978). Norris (1975:7) recognizes that the significant reduction in the number of Sterling phase sites may be because of a sampling error, or it could represent "a significant change in settlement patterns and population." Site Ms 588 has potential for contributing information that could answer questions concerned with the processes of settlement fluctuation in sites ancillary to the Cahokia complex during the early Mississippian culture period. Thus, site Ms 588 can be considered eligible for nomination to the National Register



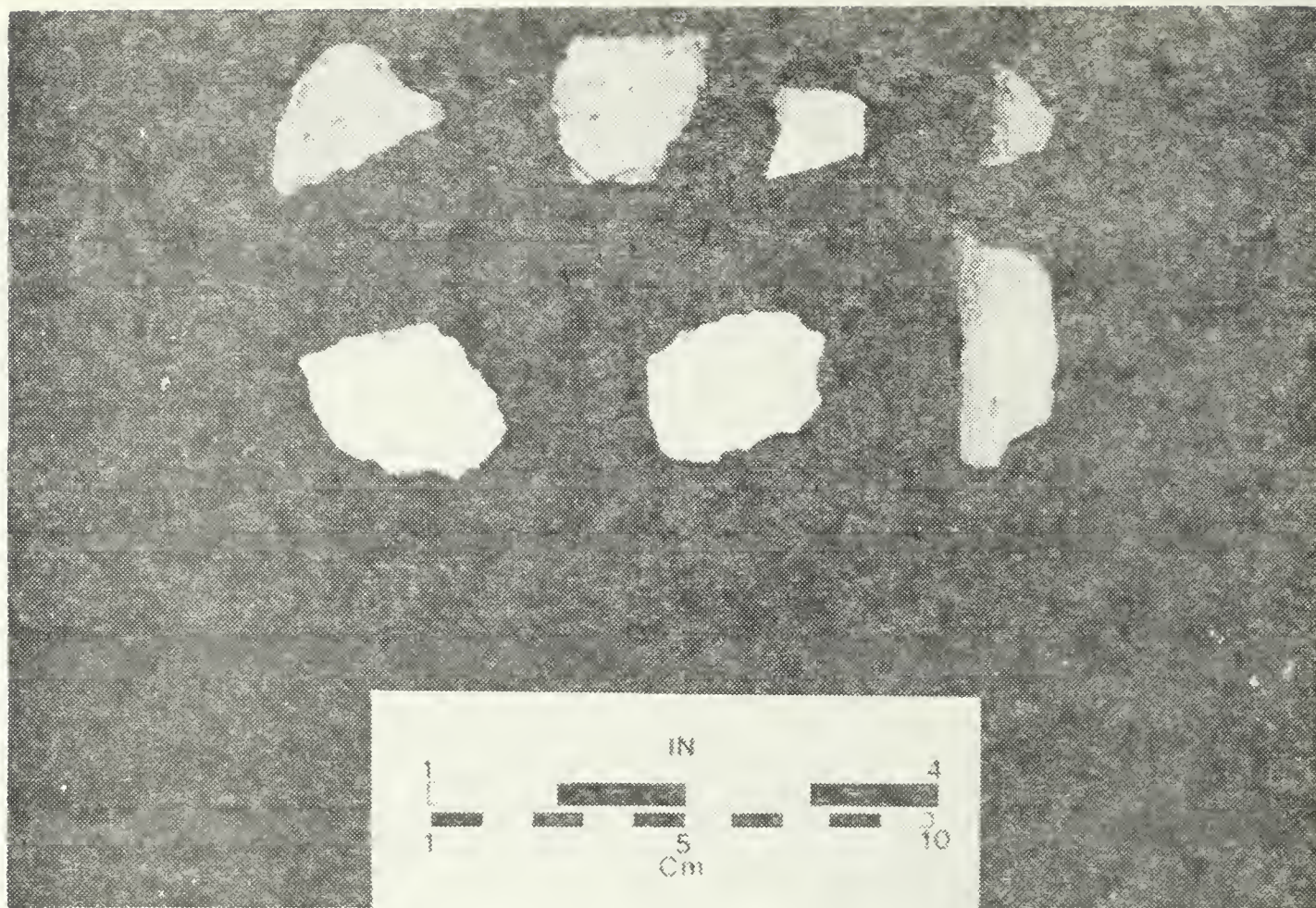


PLATE 80. A. Grade Separation #18, Representative Artifacts Possibly Related to Illinois Site Ms588.



PLATE 80. B. Bixby Interlock, Representative Artifacts from Illinois Site Mo199.



Site Number: Ms 588, continued

of Historic Places. However, since the site lies outside the proposed construction area, cultural resource clearance for Grade Separation #18 is recommended.

#### MATERIAL RECOVERED

##### Prehistoric

- 2 retouched flakes
- 11 bifacial thinning flakes
- 1 angular shatter
- 3 limestone fragments (2 burned)
- 3 shell tempered plain sherds
- 1 shell tempered, plain rim sherd with extruded lip

##### Historic

- 1 coarse paste earthenware

##### Miscellaneous

- 1 mammal bone fragment

\* \* \* \* \*

#### GRADE SEPARATION #19

Grade Separation #19 is located near Fairmont City at the Collinsville road crossing of the Alton and Southern tracks. Because of structures and parking lots, only the southwest quadrant was open for inspection. Pre-historic lithics were collected from the surface and one flake was recovered from an unstructured shovel test. This grade separation lies within the boundaries of the Cahokia Mounds National Register District and is considered to be a portion of the site. The area where the material was recovered is less than 500 meters from the "observatory" and a major mound. Avoidance is recommended for this site. It is possible that portions of the Cahokia site may remain intact beneath the parking lots on the remaining quadrants, but it was not possible to determine that in this phase of the investigations. It is recommended that to protect this very important site the grade separation be built within the existing right-of-way using retaining walls. If avoidance is not possible, it may be necessary to conduct extensive testing and data recovery operations.

#### GRADE SEPARATION #24

This grade separation is located at the Forest Boulevard crossing of the Alton and Southern line, east of Washington Park. A small amount of 20th century historic material was collected from the northwest quadrant of the crossing. While this material appears to lack cultural integrity and

is relatively recent, at least portions of the grade separation are located within the Cahokia Mounds National Register District. Again, it is possible that intact portions of the Cahokia site exist within the boundaries of the proposed grade separation. It is recommended that the grade separation be built within the existing right-of-way. If avoidance is not possible, then it may be necessary to conduct extensive testing and data recovery operations.

#### GRADE SEPARATION #43

Grade Separation #43 is located at the State Route 3/U.S. 50 crossing of what appears to be an industrial spur of a Terminal Railroad Association line near Sauget. The eastern portions of the separation were not open for inspection because of industrial development. The western quadrants were investigated through a combination of surface reconnaissance and unstructured shovel tests. No cultural material was noted in the area. Cultural resource clearance is recommended for Grade Separation #43.

#### GRADE SEPARATION #44

Grade Separation #44 is located at the Jerome Lane crossing of a Missouri Pacific line in Maplewood Park. Three of the four quadrants were developed as housing tracts, with only the northeast quadrant, which was planted in winter wheat, open to adequate surface inspection. A thorough inspection was made in the open field and a walkover with surface inspection of exposed segments was conducted in the remaining areas. No archaeological material was noted during the investigation and none of the structures appear to meet minimum criteria for National Register of Historic Places inclusion. Cultural resources clearance is recommended for Grade Separation #44.

#### GRADE SEPARATION #45

This grade separation is located at the Mildred Street crossing of a Missouri Pacific line in Maplewood Park. All four quadrants were developed with housing, light industry, and a church. Therefore, investigations were restricted to surface inspections of exposed areas. No archaeological material was noted and none of the structures appear to meet minimum requirements for inclusion in the National Register of Historic Places. The literature search revealed that there are no known sites within the area. Therefore, cultural resources clearance is recommended for Grade Separation #45.

#### GRADE SEPARATION #47

Grade Separation #47 is located at the State Route 3/U.S. 50 crossing of a Missouri Pacific line at North Dupon. All four quadrants have been developed with housing tracts and a school. Because of the development, investigations were restricted to surface inspection of exposed areas. No archaeological material was noted. None of the structures in the grade separation appear to meet the minimum requirements for inclusion in the National Register of Historic Places. Cultural resources clearance is recommended for Grade Separation #47.



## INTERLOCKS, BRIDGE APPROACHES, AND PARKING SPURS

Cultural resources surveys were conducted on the proposed approaches to both Merchants and McKinley Bridges. The survey of the southeast approach to Merchants Bridge was accomplished during the archaeological testing of Kerr Island. No significant resources were located as a result of this survey. The northeast approach to the bridge crosses a portion of a U.S. military installation and has been previously impacted by both fill and construction activity. The northwest approach to the McKinley Bridge crosses a section of industrially developed land that was not accessible for subsurface survey. Surface inspection indicated no archaeological sites and no significant structures were noted. The northeast approach to the bridge also crosses a developed area. Although no archaeological sites were noted in the area, the approach will impact the bridge office. The architectural integrity of the bridge office appears to have been jeopardized by major modification of the main facade, the construction of relatively recent additions on both the right and left sides, and a 2-story shed roof addition in the rear. No evaluation of the interior of the structure has been made. As a result of these modifications, the McKinley Bridge office does not appear to meet the minimum criteria for inclusion in the National Register of Historic Places. Cultural resource clearance is recommended for the bridge approaches.

In addition to the bridge approaches, the location of a proposed B&O Railroad parking spur was also surveyed. The proposed spur is located between the B&O and Penn Central tracks, beginning on the east side of an Alton and Southern line at H.N. Cabin tower and running parallel with the B&O line to Black Lane. This spur would be entirely within the boundaries of the Cahokia Mounds National Register District, and would run through the remaining portions of the Rattlesnake Mound. It is recommended that this spur be relocated.

The following paragraphs are descriptions of the location of the proposed interlocks and the cultural resources, if any, recorded at each. Recommendations are made for each interlock.

### LENOX INTERLOCK

The Lenox interlock is located in the southern quadrant of the intersection of a Norfolk and Western and an Alton and Southern line, west of the town of Mitchell, Illinois. The area is presently used as a railroad equipment supply yard and has been heavily impacted by equipment movement and construction. Because of the heavily disturbed nature of the area, cultural resource clearance is recommended for the Lenox interlock.

### NKP INTERLOCK

The NKP interlock is located at the intersection of an Alton and Southern line and a Chicago and Northwestern line, east of Madison. While visibility in the area was good to moderate, no cultural resources were located. Cultural resource clearance will be recommended for the NKP interlock.

## NKP (IT) INTERLOCK

The NKP(IT) interlock is located at the intersection of an Alton and Southern line and Illinois Terminal Railroad line, less than one mile south of the NKP interlock. The proposed modifications are in the southeast and northeast quadrants of the intersection. A previously-recorded prehistoric archaeological site, Ms 621, was located in a winter wheat field in the southeast quadrant. Ms 621 is situated on an outside levee remnant of the Horseshoe Lake meander and is approximately 300 meters west of the present water level.

Site Ms 621 was initially located by Norris (1975:5) during a survey of the Horseshoe Lake State Park area. This site is one of 39 that were classified as belonging to the Late Woodland Jarrot phase (A.D. 800-900). Since this site is located on a natural levee, which is a formation of alluvial accretion, it is quite possible that intact cultural deposits exist below the plow zone. Benchley, in outlining the existing archaeological knowledge of the St. Louis area, argues for the high research potential of transitional Late Woodland-Mississippian sites (1975:23). She proposes that these sites may offer pertinent information about the development of local Mississippian cultural florescence. Furthermore, she assigns a very high priority to sites that are located in areas of possible preservation.

Since site Ms 621 has the potential to offer valuable information to the ongoing study of prehistoric cultural processes in the American Bottoms, further work is recommended in order to determine the eligibility of this site to the National Register of Historic Places. Determination of significance can be accomplished by excavation of test pits that would ascertain the existence and extent of intact cultural deposits. Between 10 and 15 1m<sup>2</sup> test units should be sufficient to make this determination.

### MATERIAL RECOVERED

#### Prehistoric

- 2 thin biface fragments, showing heavy cutting type wear
- 2 decortification flakes, heat altered
- 2 bifacial thinning flakes
- 1 angular shatter
- 1 sandstone anvil or nutting stone

#### Historic

- 1 clear container glass, partial base
- 6 rubber tile fragments
- 1 white plastic fragment

\* \* \* \* \*



## NEWPORT INTERLOCK

The Newport interlock is located on the south side of the east approach to Merchants Bridge, near the town of Venice. The interlock will cross an area that is currently used as a park. Because of the heavy grass cover, the area was investigated through the application of unstructured shovel tests and auger tests, using a 4-inch, hand-turned bucket auger. No cultural material was recovered during the survey, and no previously recorded sites were identified during the literature search. Therefore, cultural resources clearance is recommended for the Newport interlock.

## H.N. CABIN INTERLOCK

The H.N. Cabin interlock is located in the northwest quadrant of the intersection of the Alton and Southern and Penn Central tracks at the H.N. Cabin tower. Vegetation in the area had recently been burned and visibility was moderate. The corridor had been flagged and no cultural material was noted within the right-of-way. Because the interlock is within the boundaries of the Cahokia Mounds National Register District and the right-of-way extends into the monument's property, however, the possibility exists that intact portions of the Cahokia site exist within the proposed interlock. If avoidance of undisturbed ground is not possible, then extensive testing and possibly data recovery operations will be necessary.

## 40TH STREET INTERLOCK

The 40th Street interlock is located in the northeast quadrant of the intersection of an Alton and Southern and a Louisville and Nashville line near Washington Park. The right-of-way crosses a vacant field, and soil profiles in shovel tests indicate that the area has been filled. A single flake was recovered from the surface within the right-of-way, but was probably part of the fill. Cultural resources clearance is recommended for the 40th Street interlock.

## S.O. INTERLOCK

The S.O. interlock is located in the east quadrant of the intersection of a Southern line and an Alton and Southern line. The right-of-way passes through an area of small, fairly recent houses. None of the structures appears to meet the minimum criteria established for inclusion in the National Register of Historic Places. Surface inspection of the exposed portions of the right-of-way produced no archaeologically significant material. Cultural resources clearance is recommended for the S.O. interlock.

## VALLEY INTERLOCK

The Valley interlock is located in the southern quadrant of the Illinois Central Gulf and Missouri Pacific intersection at the southwest edge of East St. Louis. This area is heavily industrialized and the proposed right-of-way passes through a section of tank farm, crosses a paved road, and a dirt access road in connecting the two sets of tracks. Surface features are highly disturbed and it is doubtful if any cultural resources remain intact below ground surface. Cultural resource clearance is recommended for the Valley interlock.

## BIXBY INTERLOCK

The Bixby interlock is located 200 meters north of Hill Lake Creek in Monroe County, Illinois, near the FAI-270 approach to the J.B. Bridge. This proposed interlock is situated in the northern quadrant of the Illinois Central Gulf and Missouri Pacific track intersection south of Dupu, Illinois. Pedestrian reconnaissance and unstructured shovel tests revealed cultural material representing a prehistoric site directly in line with the proposed Bixby right-of-way. This site was previously recorded as a result of the IDOT FAI-270 cultural resource survey and is identified as Mo 199 in the Illinois SHPO records. However, information specific to this site was not available in the FAI-270 survey report (Kelly et al. 1979), presumably because of the fact that the site was not in danger of being impacted by proposed highway construction.

The WAPORA survey of the site area revealed two general scatters of material separated by approximately 50 meters. The site encompassed an area of roughly 2,000 m<sup>2</sup> with a light density of artifacts occurring in the two loci. Surface visibility was good since the field had been plowed after the fall harvest. Attempts at determining the vertical extent of the site were unsuccessful since the ground was frozen at the time of survey, and the shovel cuts did not penetrate below the plow zone.

The occurrence of grog tempered, red slipped ceramic sherds along with a chert hoe fragment would indicate that this site represents a Late Bluff/Mississippian farmstead (Plate 80b). The site has been previously disturbed by agricultural activity, and the eastern edge of the site may have been impacted by construction of the Missouri and Pacific Railroad grade. The site lies directly in line with the proposed Bixby interlock and will be destroyed by its construction.

Mo 199 is one of several Late Bluff/Mississippian farmsteads or camps assumed to be related to the nearby Pulcher Mound town. Sites Mo 195, Mo 200, Mo 552, Mo 593, Mo 594, and Mo 608 possess a Late Woodland or Mississippian cultural component (Kelly et al. 1979:35), and are located within about a one kilometer radius of site Mo 199. Because of the extensive research design incorporated by the FAI-270 survey project to interpret cultural resource data in the American Bottoms, and because of the proximity of site Mo 199 to the study corridor, the determination of significance or potential research contribution of this site should be made in the context of this "grand design." Further work to assess minimal criteria for eligibility of this site to the National Register of Historic Places should include: controlled surface collection to determine intra-site patterning and subsurface testing to determine the extent of cultural deposits or features. At least 10 to 15 lm<sup>2</sup> test units should be used to make this determination.

## MATERIAL RECOVERED

### Prehistoric

- 1 thick biface
- 1 thin biface fragment
- 1 utilized flake



Site Number: Mo 199, continued

Prehistoric (continued)

- 2 retouched flakes
- 46 bifacial thinning flakes
- 2 decortification flakes
- 6 angular shatter
- 1 chert hoe fragment
- 1 burned sandstone
- 2 grog tempered, red slipped interior and exterior sherd
- 1 grog tempered, red painted exterior sherd
- 1 grit tempered sherd

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SUMMARY

During the survey phase of the East St. Louis MARGE archaeological investigations, WAPORA archaeologists identified 16 previously unknown sites, and relocated three previously recorded sites. Of the 16 newly recorded sites, 2 (W-761-11 and W-761-19) are single-component prehistoric sites, 7 (W-761-2, W-761-3, W-761-4, W-761-6, W-761-16, W-761-17, and W-761-20) are single-component historic sites, and 7 (W-761-5, W-761-7, W-761-8, W-761-9, W-761-12, W-761-13, and W-761-14) are multi-component prehistoric and historic sites. The three previously recorded sites are all single-component prehistoric sites. Twelve sites were identified during the survey of the common TOFC yard, four sites were recorded during the survey of the proposed Centreville loop extension, and three site were recorded during survey of the proposed grade separations and interlocks. Final recommendations are discussed in the following chapter.





## IX. SUMMARY AND RECOMMENDATIONS

### INTRODUCTION

The goals of the East St. Louis MARGE archaeological testing project were as follows:

- 1) to evaluate the cultural resources within the proposed project area in terms of their archaeological and historical integrity and significance,
- 2) to provide recommendations for determinations of eligibility for inclusion in the National Register of Historic Places, and
- 3) to provide recommendations for the mitigation of adverse impacts to those cultural resources that have been considered to be eligible for National Register inclusion.

As the testing phase research progressed, it became very apparent that many of the sites being evaluated are related to each other within a strong historical context, and that it would be impossible to evaluate them independently of their relationships with each other. This observation was further complicated by the broad definition of the term "site" that was used by the Illinois State University researchers during the reconnaissance phase of the project (Smith and Lange 1980). During the reconnaissance, the term "site" was used to designate both a single locus of human activity, such as a dump (railroad dump) or a house with its associated archaeological deposits (B Street House, Tremont Hotel), and an entire assemblage of closely-related loci that are elements of a higher level of organization, such as a distinct community (Illinoistown, Kerr Island) or a complete railroad facility (TRRA Roundhouse and Shops). Thus, the B Street House and the Douglas School were afforded separate site designations even though they are both elements of the Middle Patch residential enclave, while Illinoistown, which consists of about 16 city blocks of mixed residential and commercial use, was given a single site designation. It can be concluded that the site designations were used as convenient bookkeeping terms, and do not preclude the existence of other levels of organization either above or below the previously-assigned site designations. Because of the need to take into account the interrelatedness of sites within the urban setting, it is proposed that the cultural resources that have been identified and evaluated during the East St. Louis MARGE testing project can best be managed through the use of multiple resource districts.

In the "Guidelines for Level of Documentation Necessary to Make Determinations of Eligibility for Inclusion in the National Register of Historic Places," published by the National Park Service, the following definitions are used as categories for cultural resources:

1. A "district" is a geographically definable area, urban or rural, possessing a significant concentration, linkage or continuity of sites, buildings, structures, or objects which are united by past events or aesthetically by plan or physical development. A district may also be comprised

of individual elements which are separated geographically but are linked by association or history.

2. A "site" is the location of a significant event, activity, building, structure or archeological resource where the significance of the location and any archeological remains outweigh the significance of any existing structures.
3. A "building" is a structure created to shelter any form of human activity. This may refer to a house, barn, church, hotel or similar structure. Buildings may refer to a historically related complex, such as a courthouse and jail or a house and barn.
4. A "structure" is a work made up of interdependent and interrelated parts in a definite pattern or organization. Constructed by man, it is often an engineering project large in scale.
5. An "object" is a material thing of functional, aesthetic, cultural, historical or scientific value that may be, by nature or design, movable yet related to a specific setting or environment.

By using these definitions, evaluations and recommendations can be made at various levels of organization, thereby eliminating the collection of redundant information. What may be an appropriate mitigation measure at the site level may not be appropriate at the district level, and vice versa. Thus, by the use of multiple resource districts the mitigation of adverse impacts to the cultural resources can be conducted in the most time- and cost-efficient manner possible.

The proposed districts have been evaluated in terms of their significance to the understanding of the history of the East St. Louis area, and are recommended for determinations of eligibility for inclusion in the National Register of Historic Places. The four multiple resource districts have been defined both by locational criteria and by historical association. They include: 1) Bloody Island, 2) Illinoistown, 3) National City, and 4) Kerr Island. The following discussion for each of these districts will include a boundary and location description, a statement of significance for the district, and recommendations for mitigation of future adverse impacts to each district.

#### BLOODY ISLAND MULTIPLE RESOURCE DISTRICT

By far the largest and most complex of the four districts, Bloody Island is defined both geographically and by historical association. Physically, its boundaries extend from the Mississippi River shoreline on the west to the old Cahokia Creek channel on the east, and from MacArthur Bridge on the south to the East St. Louis pumping station on the north (Figure 57). The multiple resource district also includes several non-island railroad site components associated with the railroad terminal freight facilities on the island. In addition to the railroad-related complexes that make up the vast majority of the Bloody Island district, it



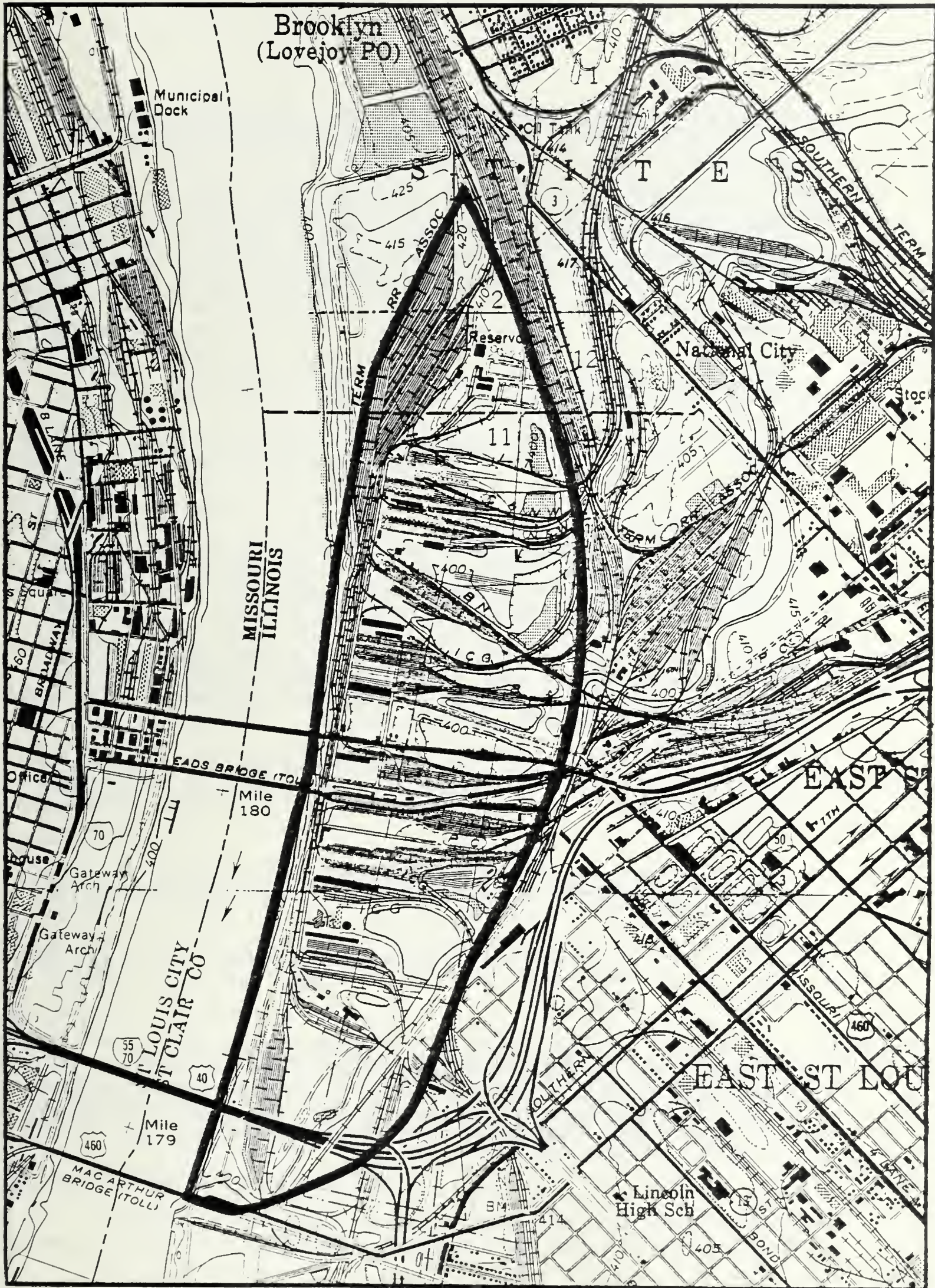


FIGURE 57. Boundaries of the Proposed Bloody Island Multiple Resource District.



also includes several residential enclaves, commercial establishments, utilities, early ferry complexes, a dump, and engineering structures associated with the linking of the island to the mainland.

It was decided to request a determination of eligibility for the entire district because it is believed that the relative economic and sociopolitical significance of each individual site within the district is inextricably tied to the historical development of Bloody Island as a whole. The island itself is significant because of the primarily transportation-related role that it played in the development of the St. Louis metropolitan area. It is also felt that a determination of eligibility for the entire district will result in the development of a single mitigation plan, if such action becomes necessary, thereby reducing the potential for collecting and/or preserving redundant information.

The present level of archival and historical documentation for the Bloody Island Multiple Resource District is comprehensive and complete on a general historical level. Most secondary sources have been consulted, as well as most readily available maps and photographs. In addition, a number of primary sources dealing with the history of the island have also been researched. However, there were several specific research domains identified during the testing phase that deserve further investigation during any necessary data recovery operations. These research questions include, but may not be limited to, the following:

1. How do the Upper, Middle, and Lower Patches compare in terms of their size and temporal span, ethnic affiliations, demographics, and socioeconomic factors? How does the Leap Year site compare to the other three residential enclaves in these regards?

2. Who worked at the railroad sites and where did they live through time? How did representative rail facilities operate on a day-by-day basis? What were the economic trends that occurred during railroad use of the island?

3. How did the commercial aspects of Bloody Island affect local economics and how were they affected by changes in the transportation sector?

4. How did the Wiggins Ferry Company operate on a day-to-day basis? What was its effect through time on the economic and social makeup of the island?

The types of information that should be used to answer these questions and to complete the historical documentation of the Bloody Island Multiple Resource District should primarily be limited to extensive oral history research, census and tax records, city directories, probate and church records, and newspapers. Additional maps and photographs may also exist, the latter probably residing within private collections.



## RECOMMENDATIONS FOR INDIVIDUAL SITES WITHIN THE BLOODY ISLAND MULTIPLE RESOURCE DISTRICT

The following recommendations should be used to guide the development of a data recovery plan to mitigate any adverse effects of the East St. Louis MARGE project on the archaeological and architectural resources within the Bloody Island Multiple Resource District. These data recovery operations should be conducted in conjunction with the historical research discussed in the previous paragraphs.

### The Upper Patch

This residential enclave, which existed in the northern portion of the island during the 19th and early 20th centuries, has been destroyed by construction of railroad facilities and a pumping station (Figure 3a). The site does not possess any archaeological or architectural integrity, and no further work is recommended.

### The Middle Patch

The Middle Patch is a residential enclave that extends from Missouri Avenue to the Eads Bridge, and from what was the previous location of A Street to what was originally the location of C Street (Figure 3a). The Middle Patch dates from the mid-19th century to the present, and consists of both architectural and archaeological resources. It is recommended that further architectural investigation of the Wolfer store be conducted to document construction phases through time. Further archaeological excavations in relatively undisturbed portions of the Middle Patch (including the back yard of the B Street house) should be conducted to test hypotheses on coal stove waste dumping patterns, adaptations to the high grade policy, and trends in socioeconomic patterns. The Douglas School site appears to require no further work.

### The Lower Patch

The third residential enclave on the island, located somewhere south of the Eads Bridge in the vicinity of the L&N freight terminal, was completely destroyed at the turn of the century by railroad construction (Figure 3a). Because the site has lost its archaeological and architectural integrity, no further work is recommended.

### The Leap Year Site

This late 19th and early 20 century black settlement was located near the junction of Broadway and Brooklyn Avenues (Figure 3a). Archaeological testing revealed that the site has been severely impacted, and that it contains no additional research value. No structural remains exist at the site. Therefore, no further work is recommended.

### Bonnie's Tap/Carpenter Shop Site

Bonnie's Tap is located at the southeast corner of Broadway Avenue and Front Street (Figure 3b). Because it has been extensively altered

through time, the tavern does not retain any architectural significance, nor are there any intact archaeological deposits associated with it. However, in the adjacent lot were found intact archaeological remains that were probably associated with a 19th/early 20th century carpenter shop/warehouse located on that lot. The archaeological remains have been buried beneath eight feet of fill, and probably will not be impacted by any proposed construction associated with the MARGE project. If future development threatens the site's archaeological integrity, however, data recovery operations at the carpenter shop/warehouse site should be undertaken.

#### Wies Hotel

Located at the corner of Missouri and Sullivan Avenues (Figure 3b), the Wies Hotel does not appear to be significant architecturally, and no archaeological deposits are associated with the site. Current documentation of this structure is considered to be sufficient, and no further work is recommended.

#### Tremont Hotel

The Tremont Hotel site is located on the south side of Missouri Avenue, near the former junction of Missouri and Brooklyn Avenues (Figure 3b). The archaeological deposits of this 19th and early 20th century boarding house are relatively intact, and appear to offer a great potential for answering research questions about urban refuse disposal patterns and the socioeconomic status of boarding house occupants during a period when many transients were moving through the East St. Louis gateway. The results of the archaeological excavations at the Tremont Hotel site, if data recovery is necessary, should be compared to those for the Middle Patch and Illinoistown.

#### East St. Louis Gas Works Site

The site of the East St. Louis gas works, located north of Missouri Avenue (Figure 3b), has been almost totally impacted by later construction, although a single gasometer foundation still appears to be intact. While the archaeological investigation of the gasometer foundation could possibly reveal information on construction techniques, it is probable that this information is more readily available from historical sources. Therefore, no further work is recommended for the gas works site.

#### East St. Louis Waterworks

The East St. Louis waterworks complex, located at the very north end of the island (Figure 3b), is an excellent example of late 19th and early 20th century utilities construction. Architecturally, the waterworks complex appears to be highly significant, and should be preserved in place if at all possible. If future impact to any segment of the complex is unavoidable, then data recovery should include a complete architectural documentation by the National Architectural and Engineering Record (NAER) and additional historical documentation to develop a better understanding of the development of the waterworks in relation to local industrial and residential growth. Although preliminary investigations have concentrated



on the low pressure pumping station, preservation planning and/or data recovery operations should be expanded to include the high pressure pumping station and other attendant facilities in the project area as well.

#### Piggott Ferry Complex

The site of the original Piggott ferry complex was washed away by the meandering Cahokia Creek and Mississippi River during the mid-19th century (Figure 3a). Since the site has been destroyed, no further work is recommended.

#### 1843 Wiggins Ferry Complex

Archaeological testing and historical research has revealed that the remains of the group of buildings shown on the 1843 map (Figure 6) were probably impacted to some degree by the meandering of Cahokia Creek. Two possible remnants of the site may have been left intact, however, on either side of the 1909 location of the creek (Figure 7). One of these two areas is probably located under the northwest section of the Illinoistown Roundhouse and Shops site, and the other area may be located at the east end of the ACFX yard, west of the MacArthur Bridge approach (Figure 3a). These areas should be tested through either deep trenching or coring to determine if intact site deposits still exist. If site remains are located and determined to be significant, then either preservation or data recovery operations should be implemented.

#### 1843-1851 Wiggins Ferry Complex

Closely related to the previously-discussed site, the later Wiggins ferry complex and allied commercial activities were located along the east bank of the Mississippi River. As the island gradually developed towards the south through continual accretion, the ferry complex also developed towards the south. This period of linear settlement along the east shore ended abruptly with the harbor improvements of the 1850s. The remains of this mid-19th century development, if they still exist, are probably located beneath the Illinoistown Roundhouse and Shops complex. Limited deep trenching and/or coring should be used to determine if significant archaeological remains of this settlement are intact. If so, then the remains should be included as a component of the Illinoistown Roundhouse and Shops site, and should be afforded the same degree of protection, through either preservation or data recovery.

#### Railroad Dump

The railroad dump, located south of the Poplar Street Bridge (Figure 3b), was archaeologically tested and evaluated as being of secondary deposition. A large representative sample of artifacts was recovered from the site, thus providing a sufficient data base for possible future research into dining ware- and food consumption-related topics. The site itself has little potential for producing additional significant information, and no further work is recommended.

### Diversion Dikes (1838 Northeast, 1838 South, 1839 North)

These three engineering features associated with the St. Louis harbor improvements have been documented archivally, but it is not known if remains of the structures have survived island development. It is possible that the wood remains recovered during earlier coring along the waterfront and reported by Smith and Lange (1980) may have been from one of these dikes. Coring or deep trenching should be conducted in the locations shown in Figure 3a to determine the actual location and preservation potential of these dikes. If significant intact remains are located, then either preservation or data recovery should be implemented.

### Road Dikes (Bowman, Christy, and Vaughn)

These three road/dike features were constructed to bridge the island with the mainland across the old channel of the Mississippi River (Figure 3a). Bowman, Christy, and Vaughn Dikes are now known as Missouri, Broadway, and Trendley Avenues, respectively. Christy Dike is currently well preserved beneath the late 20th century road surface of Broadway Avenue. However, Missouri and Trendley Avenues, whose late 19th-century granite paving is exposed in many places, are being impacted by heavy truck traffic and neglect. These two dike-roads should be protected under a new road surface, or rebuilt on the old granite block design and maintained for historical appreciation by the public. Any future construction that would impact the deposits of the old roads and dikes should be preceded by archaeological investigations and/or monitoring to determine construction techniques of these invaluable engineering structures.

### Railroad Parcels 1, 2, 4, 5, 6, 7, 8, and 13

The parcel designations correspond to the land areas arranged in a perpendicular fashion along Front Street that contained the railroad terminal facilities and trackage on the island (Figure 3b). Each parcel was used by a series of railroad companies and their successors; each series a result of merger, reorganization or land transaction. Examination of maps, aerial photographs, historic photographs, and railroad documents reveals a long and varied history of freight terminal and engine maintenance activity on the island. However, in Parcels 1, 2, 4-8, and 13, no significant architectural or archaeological remains with the potential of producing additional information exist. Therefore, no further work is recommended for these sites.

### Parcel 3

Parcel 3 includes the Wabash Railroad freight terminal complex on the island, as well as the Wabash Roundhouse complex on north State Route 3 (Figure 3b). Archaeological testing at the Wabash freight facility uncovered no evidence for intact remains of the original T,W,& W Roundhouse, but testing did provide some insight into construction phases at the Wabash freight terminal. However, it is believed that further archaeological investigations would provide no additional significant information, and no further work is recommended for the Wabash freight complex. The Wabash Roundhouse site is significant in that it possesses the only remaining coal tipple and associated service structures in the metro-East



area. It is recommended that these structures be preserved in place. Should adverse impacts to these structures be unavoidable, then data recovery operations should center around the complete architectural documentation of the coal tipple and associated structures by NAER.

#### Parcel 9

Parcel 9 includes the engine maintenance facilities, the coach yard, and the freight terminal for the New York Central/C,C,C,& St. L (Big Four) Railroads. The remains of the engine and coach maintenance facilities are neither unique nor significant examples of this type of site, and it is believed that sufficient documentation of these facilities has been completed. Therefore, no further work is recommended for the Big Four roundhouse and coach yard complex. The Big Four freight office is significant historically in that it apparently housed the headquarters for much of the Big Four's freight handling operations. It is also significant from an architectural point of view, being a good example of Art Deco-influenced industrial architecture. It is strongly recommended that this structure be preserved and considered for adaptive reuse. Barring these recommendations, data recovery operations should focus on a complete architectural documentation by NAER.

#### Parcel 10

The Illinoistown Roundhouse and Shops complex, located at the eastern end of Parcel 10 (Figure 3b), is significant in that it represents an excellent example of in situ archaeological remains of a type of site (i.e., an early 20th century industrial site) that is generally not afforded much public interest. For this reason, these intact remains of the Illinoistown Roundhouse complex are significant from a "public awareness" point of view. It is recommended that additional limited excavation be conducted to expose more of the remains of the earlier roundhouse complex, and that all of the archaeological remains be stabilized and developed into an interpretive display for public use. This site provides a perfect opportunity to transmit knowledge to the general public about the growth and development of the East St. Louis area through its transportation facilities.

#### Parcel 11

Parcel 11 includes the standing G,M,& O Freighthouse and possibly the archaeological remains of both the 1874 Cairo and St. Louis narrow gauge roundhouse and the 1890s Mobile and Ohio engine maintenance facility. The standing freight facility is in a condition of severe neglect, and does not warrant any further work. The two roundhouse sites should be tested, however, for evidence of intact archaeological remains. This testing should be conducted through limited backhoe trenching. Should significant intact deposits be found, they may offer the potential for studying early roundhouse construction techniques. In this case, either preservation or data recovery operations should be implemented.

#### Parcel 12

Parcel 12 includes both the site of Wiggins Roundhouse at the southern end of the island, and the Terminal Railroad Association's roundhouse and

shops, located at the southeastern corner of Brooklyn (Figure 3b). The site of the Wiggins Roundhouse has been impacted by later construction, and no further work is recommended. The TRRA Brooklyn Roundhouse and Shops complex, on the other hand, is highly significant from both an architectural and an engineering point of view. Still retaining much of its original equipment and associated structures, the TRRA engine maintenance facility is representative of most of the other enginehouse facilities in the project area. Based upon this demonstrated significance, it is strongly recommended that the complex be preserved in place. If adverse impacts to the site are unavoidable, however, then data recovery operations should include a complete architectural and engineering record of the complex by NAER, and the salvage of as much of the equipment as possible to be set up in a museum or reconstruction, possibly at the Illinoistown Roundhouse site.

#### ILLINOISTOWN MULTIPLE RESOURCE DISTRICT

The boundaries of the Illinoistown Multiple Resource District are Interstate 55/70 on the south and east, the ICG tracks on the west, and the MacArthur Bridge approach on the west and north. The multiple resource district defined here does not include all of Illinoistown, since much of the settlement lies outside the East St. Louis MARGE project boundaries and was not afforded close examination. It would be possible in the future, however, to expand the boundaries of the district to include the remainder of the settlement upon adequate documentation of its integrity.

The Illinoistown multiple resource district is considered significant from an historical viewpoint in that it was the site of the first major settlement in the East St. Louis area. Although earlier settlements did exist in the area, they were primarily commercial in nature, like the various ferry complexes. Illinoistown, on the other hand, developed primarily as a residential area supported by various attendant services and support facilities. The district boundaries also include the remains of a smaller, earlier attempt at permanent settlement, called Jacksonville. Another early settlement, Washington, was completely washed away by the meandering of the Mississippi River during the mid-19th century. The district is also significant archaeologically because its intact deposits offer the potential for answering research questions concerning urban refuse disposal patterns, land use patterns during the 19th and 20th centuries, changes in the socioeconomic status of the Illinoistown residents through time, and the physical layout of the little-known Jacksonville settlement, among others.

Further historical documentation of the district should include a detailed examination of the documents for information about the origins and development of Jacksonville, its layout, its inhabitants, and the mechanics of its incorporation into Illinoistown. Research questions that still must be answered to complete the documentation of Illinoistown include an investigation of the socioeconomic dynamics of the earlier white community in contrast to the later black community, employment practices, population density in Illinoistown, and changes in the political strength of the community through time. Again, most of the secondary sources and some of the primary historical sources have already been



examined. Subsequent historical research should concentrate on a search for additional historic photographs, census and tax records, city directories, probate and church records, plats and deeds, and newspapers. A significant, though largely untapped, source of information for the history of Illinoistown during the 20th century lies within the oral history accounts of East St. Louis residents. A preliminary oral history study has revealed that rich details of life in an industrial city, not available through other sources, are contained in the stories and early memories of the local population. A significant record of the black history of Illinoistown that is not documented through written sources could be compiled through a concerted oral history and historic photo-documentation program in the city. This research would also be invaluable in the design of an effective archaeological data recovery plan. Information collected during the oral and archival research may help to identify the cultural processes involved in the activities that produced the archaeological remains.

#### SPECIFIC RECOMMENDATIONS FOR THE ARCHITECTURAL AND ARCHAEOLOGICAL RESOURCES OF THE ILLINOISTOWN MULTIPLE RESOURCE DISTRICT

The standing structures within the Illinoistown Multiple Resource District have been documented photographically and verbally described. None of these structures are believed to be significant architecturally, and no further architectural documentation is recommended.

The town of Jacksonville, founded ca. 1805 and incorporated into Illinoistown in 1818, included at least a brick tavern and a store. Two structures located on the south side of the intersection of Main and Market Streets in the 1818 plat of Illinoistown may indeed be these two buildings. Archaeological testing in the form of backhoe trenching should be conducted in this area, especially in the southwest quadrant of the intersection, to determine whether intact archaeological deposits associated with this early 19th century settlement are located in this area. If intact archaeological remains are discovered and evaluated to be significant, then a course of either preservation or data recovery should be adopted.

As stated earlier, the archaeological deposits within the Illinoistown Multiple Resource District have the potential for answering a number of important anthropological research questions. Should the integrity of these archaeological remains be threatened by future development associated with the East St. Louis MARGE project, it is recommended that data recovery operations be conducted prior to development. It is recommended that future archaeological investigations utilize a program of machine-stripping the fill deposits, mapping, and excavating a representative sample of the exposed features. To investigate the phenomenon of coal stove waste dumping, the excavation of long backhoe trenches and the mapping of trench profiles will probably prove most useful.

#### NATIONAL CITY MULTIPLE RESOURCE DISTRICT

The National City Multiple Resource District is bounded by St. Clair Avenue on the southwest, Industrial Avenue on the northwest, the

TRRA railroad tracks on the northeast, and an unnamed street abutting the back of the lots facing Commercial Avenue on the southeast (Figure 44). The district includes all of the structures and lots bounding either side of Cahokia Avenue and Commercial Avenue between St. Clair Avenue and the TRRA tracks.

The National City Multiple Resource District is significant historically because it represents an early 20th century "planned community," designed for the particular purpose of incorporating the National Stockyards. Architecturally, the district is significant in that it was built as one unit, a fact that is noticeable in the characteristic "sameness" of the houses.

The National City community has been placed into its relative historical context through the archival research conducted as part of the East St. Louis MARGE testing project. However, to complete the historical documentation of the community, further research should be centered on the changes in population density through time, social relationships within the community, employment practices, economic trends, and relationships with the stockyards. Sources to be examined should include census and tax records, city directories, stockyard records, probate and church records, plats, and newspapers. A search for additional historic photographs and an intensive oral history program should also prove invaluable in completing the historic documentation of this community.

Phase II archaeological testing at National City focused on determining the extent and integrity of the archaeological deposits within the community, and answering research questions concerning artifact distribution patterns. A total of 20 test units were excavated within the community. It is believed that the archaeological information retrieved during the testing phase will be sufficient to answer any other future research questions. Therefore, no further archaeological investigations at National City are recommended.

Architectural documentation of the community has so far consisted of a photographic essay of the houses and their surroundings. These photographs provide a "feel" for the community as it appears today, as well as demonstrating some of the range in variation among the houses. Further architectural documentation should consist of the measured drawing of a representative sample of the houses (5 to 6 structures), using NAER techniques, to show details of construction and stylistic variation.

#### KERR ISLAND MULTIPLE RESOURCE DISTRICT

The Kerr Island Multiple Resource District, located in Madison County, is bounded by the Mississippi River levee on the west, the Merchants Bridge approach on the north, State Route 3 and the Norfolk and Western tracks on the east, and the McKinley Bridge approach on the south (Figure 1).



The historic significance of the Kerr Island Multiple Resource District lies in its development as an early 20th century settlement of southern black migrants who moved to the north in search of stable employment opportunities. While this phenomenon has been investigated from a general historical point of view, very few opportunities have been available to study the effects of this migration on the community itself, and the cultural adaptations that resulted at an intra-community level as a result of disenchantment, a high population density, and economic instability because of the Depression. Kerr Island offers one such opportunity to further investigate these topics. It is also significant archaeologically in that the intact archaeological deposits at Kerr Island possess a high potential for answering research questions concerning the material culture of the site's inhabitants, their subsistence practices, refuse disposal patterns within the community, and land use patterns. The boundaries of the district may also include the archaeological remains of the early 19th century ferry complex at Venice. Since the Piggott ferry complex was destroyed by the channel meanderings of the Mississippi River, these remains, if they exist, may provide the only opportunity to archaeologically investigate the earliest commercial activities in the metro-East area.

Further historical documentation of old Venice should be centered around its development, layout, inhabitants, economic trends, and decline. Its rivalry with Illinoistown and Bloody Island should also be further investigated. Sources for information on old Venice should include census and tax records, deeds and plats, probate and church records, old newspapers, and possibly additional maps and drawings.

A number of research questions can be asked about the 20th century black settlement at Kerr Island, of which several stand out as being vital to the documentation of this community and the understanding of its archaeological remains. A still-unanswered question is how did this site come to be chosen as a settlement locus for southern black migrants and how was information on land availability transferred? Other important questions include: Where did most of the migrants come from? What specific types of employment opportunities were being sought and what was actually made available to the migrants in terms of employment? What was the social and political interaction within the community? How did demographics, land use, and population density change through time, and why? What were the subsistence patterns within the community? Has a sense of the community still been retained although its former inhabitants are now scattered throughout the metropolitan area and beyond?

Although government records, census and tax records, probate and church records, and newspaper articles may help to answer some of the above-mentioned questions, the primary source of information about early 20th century life at Kerr Island will probably be the oral history of the site's present and former inhabitants. Limited oral history studies conducted during the Phase II investigations have revealed that the Kerr Island residents enjoyed a rich and complex social interaction. To complete the documentation and to provide direction for future archaeological investigations of this culturally significant community, an intensive oral history program should be given priority attention.

The standing Kerr Island buildings are certainly not significant from an architectural viewpoint, and their cultural significance as examples of "modern" vernacular architecture has already been documented both verbally and photographically. Therefore, no further architectural documentation is recommended.

As stated earlier, the archaeological deposits within the Kerr Island Multiple Resource District have the potential for answering a number of important anthropological research questions. Phase II testing at Kerr Island has shown that intact deposits containing data relating to land use, subsistence, and socioeconomic status do exist on the island. However, because of demolition of buildings and recent dumping, these deposits are in varying degrees of preservation ranging from totally intact to completely destroyed. Further archaeological investigations should concentrate on the hand excavation of the shallow, intact lot deposits located at the extreme south and north ends of the settlement, and the large-scale stripping of vegetation and landfill and the mapping of exposed features in the middle section of the site. The use of available aerial photographs, maps, and oral history accounts will provide the baseline for relating the archaeological remains to early roads and buildings.

#### THE COMMON TOFC YARD

The location of this 700-acre tract of land, which was surveyed by WAPORA archaeologists as part of the East St. Louis MARGE Phase II investigations, is west of the communities of Brooklyn and National City. Its boundaries are State Route 203 on the south and east, a set of TRRA tracks on the west, and Industrial Avenue on the north (Figure 54).

Twelve sites were located during the survey of the proposed common TOFC yard. Of the 12 identified sites, 1 (W-761-11) is a single-component, prehistoric site; 6 (W-761-2, W-761-3, W-761-4, W-761-6, W-761-16, and W-761-17) are single-component, historic sites; and 5 (W-761-5, W-761-7, W-761-12, W-761-13, and W-761-14) are multi-component, prehistoric and historic sites.

An evaluation of these sites has demonstrated that sites W-761-2, W-761-3, W-761-4, W-761-6, W-761-7, W-761-14, W-761-16, and W-761-17 have either been severely impacted by erosion and/or development, or represent evidence of recent dumping activity. Therefore, no further work is recommended for these sites. Sites W-761-5, W-761-11, W-761-12, and W-761-13, on the other hand, appear to be intact remains of Late Woodland/Mississippian hamlets associated with the Cahokia complex to the south. Because these sites may have the potential for answering a number of research questions concerning social networks between Cahokia and peripheral villages, it is recommended that further testing be conducted at these sites to determine their archaeological integrity and to evaluate their significance. This testing should include controlled surface collection and the hand excavation of 10-15  $\text{lm}^2$  test units per site.



## THE CENTREVILLE LOOP EXTENSION

The Centreville loop extension is an irregularly shaped tract of land and right-of-way corridor located near the base of the bluff, southeast of Centreville (Figure 56). Its rough boundaries are Harding Ditch on the west, the Illinois Central tracks on the south, and State Routes 157 and 13 on the north.

Four sites were located during survey of the Centreville loop extension: 1 (W-761-19) prehistoric site, 1 (W-761-20) historic site, and 2 (W-761-8 and W-761-9) multi-component, prehistoric and historic sites. Sites W-761-8 and W-761-9 have been severely impacted by erosion and development, and no further work for these two sites is recommended.

Site W-761-19 is a Middle to Late Woodland site that may contain intact deposits. Because little is known about the Middle Woodland occupation of the American Bottoms, this site may have a high potential for contributing to the explanation of American Bottoms regional cultural development. Therefore, further testing is recommended to determine this site's archaeological integrity and to evaluate its significance in terms of a possible determination of eligibility to the National Register of Historic Places. The testing should include shallow disking, controlled surface collection, and the excavation of between 10 and 15 m<sup>2</sup> test units. Another approach to the investigation of this site might be through controlled stripping, mapping, and the excavation of a representative sample of features.

Site W-761-20 is a 19th/20th century farm site that has been extensively altered through time. As such, it does not appear to meet the criteria for inclusion in the National Register of Historic Places. However, included as part of the site is a windmill of recent vintage that is probably a totally unique example of creative architecture (see Plate 79). By strict definition, the windmill does not qualify for the National Register by virtue of its recent age. However, there is probably not another structure in the world like this one. For this reason, it is requested that a complete photographic documentation of this structure, both interior and exterior, be completed prior to its destruction.

### GRADE SEPARATIONS, INTERLOCKS, BRIDGE APPROACHES, AND PARKING SPURS

Nine grade separations were surveyed as part of the Phase II testing investigations. The locations of these separations are shown on Figure 54. Of the nine separations, only two (Grade Separations #19 and #24) appear to be culturally sensitive. Both of these grade separations are located within the boundaries of the Cahokia Mounds National Register District, and they probably include intact portions of the Cahokia site. It is recommended that to protect this very important site the grade separations be built within the existing right-of-ways using retaining walls. If avoidance is not possible, it may be necessary to conduct extensive testing and data recovery operations.

Cultural resources surveys were conducted on the proposed approaches to Merchants Bridge and McKinley Bridge. No significant resources were located as a result of these surveys, and no further work is recommended for the bridge approaches. In addition to the bridge approaches, the location of a proposed B&O parking spur was also surveyed. The location of this spur was found to be totally contained within the boundaries of the Cahokia Mounds National Register District and would run through the remaining portions of the Rattlesnake Mound. It is recommended that this spur be relocated.

Nine proposed interlocks were also surveyed by WAPORA archaeologists. Their locations are shown on Figure 54. Of the nine interlocks, three were found to contain potentially significant cultural material, two in the form of previously recorded prehistoric sites. The H.N. Cabin interlock is located within the boundaries of the Cahokia Mounds National Historic District. Because the right-of-way extends into the monument's property, the possibility exists that intact portions of the Cahokia site exist within the proposed interlock. If avoidance of undisturbed ground is not possible during construction of the H.N. Cabin interlock, then extensive testing and possibly data recovery operations will be necessary.

Illinois site Ms 621 was relocated in the southeast quadrant of the NKP (IT) interlock. Identified as belonging to the Late Woodland Jarrot phase by Norris (1975:5), this site has the potential for containing information about the development of local Mississippian cultural florescence. For this reason, further testing is recommended for site Ms 621 to determine its eligibility to the National Register of Historic Places. Between 10 and 15  $\text{lm}^2$  test units should be sufficient to make this determination.

Finally, Illinois site Mo 199 was relocated during survey of the proposed Bixby interlock. This site is one of several Late Bluff/Mississippian farmsteads or camps assumed to be related to the nearby Pulcher Mound town. Site Mo 199 has the potential to contain information important to the understanding of late prehistoric cultural dynamics in the American Bottoms. Therefore, further testing should be conducted to evaluate this site in terms of criteria for inclusion in the National Register of Historic Places. This testing should include the excavation of 10 to 15  $\text{lm}^2$  test units.

## CONCLUSIONS

For decades, the East St. Louis/American Bottoms area has been the focus of intensive research into prehistoric lifeways and cultural development, especially during the Mississippian period. Countless numbers of scholars have contributed information and theories about the social, political, and economic interactions that have taken place throughout the prehistoric occupation of the area. It has only been recently that the historic occupation of the East St. Louis vicinity has begun to receive the serious attention that it deserves.



The history of East St. Louis and its close neighbors is a sometimes joyous, sometimes bitter, but always exciting microcosm of the history of the United States as a whole. Spanning the range from initial forays into the frontier through the "golden age" of the industrial revolution into the period of urban decline and attempts at redevelopment, the history of this area is as rich and complex as any in the nation. Whether it be in the realm of social interaction, political machinations, economic development, or demographic studies, the East St. Louis area has the potential to answer innumerable anthropological and historical research questions. It behooves us as archaeologists and as scholars of history to use every opportunity to take advantage of the vast potential that the East St. Louis "gateway to the past" has to offer.





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